# DEPARTMENT OF THE NAVY FISCAL YEAR (FY) 2007 BUDGET ESTIMATES SUBMISSION



# JUSTIFICATION OF ESTIMATES FEBRUARY 2006

OTHER PROCUREMENT, NAVY BUDGET ACTIVITY 4

#### UNCLASSIFIED

# DEPARTMENT OF THE NAVY FY 2007 PROCUREMENT PROGRAM

EXHIBIT P-1

3355555555 1010x 05055 3500055050 1010x

APPROPRIATION: 1810N OTHER PROCUREMENT	, NAVY	DATE: FEBRUARY 2006
--	--------	---------------------

			MILLIONS OF DOLLAR	(S	C.
LINE NO ITEM NOMENCLATURE		QUANTITY COST	QUANTITY COST	FY 2007 QUANTITY COST	
BUDGET ACTIVITY 04: ORDNANCE SUPPORT EQUIPMENT					
SHIP GUN SYSTEM EQUIPMENT					
99 NAVAL FIRES CONTROL SYSTEM	A	3.3	4.3	3.3	U
100 GUN FIRE CONTROL EQUIPMENT	A	10.2	10.9	7.4	U
SHIP MISSILE SYSTEMS EQUIPMENT					
101 HARPOON SUPPORT EQUIPMENT	A			.1	U
102 NATO SEASPARROW	A	24.9	37.9	4.6	U
103 RAM GMLS	A	26.8	25.7	10.0	U
104 SHIP SELF DEFENSE SYSTEM	В	37.8	29.0	56.7	U
105 AEGIS SUPPORT EQUIPMENT	A	61.5	101.6	75.3	U
106 SURFACE TOMAHAWK SUPPORT EQUIPMENT	A	70.2			U
107 TOMAHAWK SUPPORT EQUIPMENT	A		74.1	61.2	U
108 SUBMARINE TOMAHAWK SUPPORT EQUIP	A	5.4			U
109 VERTICAL LAUNCH SYSTEMS	A	9.8	8.5	6.6	U
FBM SUPPORT EQUIPMENT					
110 STRATEGIC MISSILE SYSTEMS EQUIP	A	101.4	106.7	111.1	U
ASW SUPPORT EQUIPMENT					
111 SSN COMBAT CONTROL SYSTEMS	A	111.2	132.1	92.9	U
112 SUBMARINE ASW SUPPORT EQUIPMENT	A	4.8	4.8	4.9	U
113 SURFACE ASW SUPPORT EQUIPMENT	A	10.2	6.3	4.6	U
114 ASW RANGE SUPPORT EQUIPMENT	A	7.1	7.1	7.2	U

PAGE N-1

#### UNCLASSIFIED

# DEPARTMENT OF THE NAVY FY 2007 PROCUREMENT PROGRAM

APPROPRIATION: 1810N OTHER PROCUREMENT, NAVY DATE: FEBRUARY 2006

MTT.T	TONS	OF	DOLLA	RS

EXHIBIT P-1

					~
LINE NO ITEM NOMENCLATURE			FY 2006 QUANTITY COST		S E C
OTHER ORDNANCE SUPPORT EQUIPMENT					
115 EXPLOSIVE ORDNANCE DISPOSAL EQUIP	В	52.6	30.0	21.5	U
116 ITEMS LESS THAN \$5 MILLION	А	5.0	3.9	4.0	U
OTHER EXPENDABLE ORDNANCE					
117 ANTI-SHIP MISSILE DECOY SYSTEM	А	54.5	42.9	54.1	U
118 SURFACE TRAINING DEVICE MODS	А	6.3	10.5	11.2	U
119 SUBMARINE TRAINING DEVICE MODS	А	49.1	34.7	24.8	U
TOTAL ORDNANCE SUPPORT EQUIPMENT		652.1	671.0	561.6	
TOTAL OTHER PROCUREMENT, NAVY		652.1	671.0	561.6	

PAGE N-2

# Fiscal Year 2007 Budget Estimates Budget Appendix Extract Language

#### **OTHER PROCUREMENT, NAVY**

For procurement, production, and modernization of support equipment and materials not otherwise provided for, Navy ordnance (except ordnance for new aircraft, new ships, and ships authorized for conversion); the purchase of passenger motor vehicles for replacement only; expansion of public and private plants, including the land necessary therefore, and such lands and interests therein, may be acquired, and construction prosecuted thereon prior to approval of title; and procurement and installation of equipment, appliances, and machine tools in public and private plants; reserve plant and Government and contractor-owned equipment layaway, \$4,967,916,000, to remain available for obligation until September 30, 2009, of which \$23,000,000 shall be available for the Navy Reserve and Marine Corps Reserve. (10 U.S.C. 5013, 5063; Department of Defense Appropriations Act, 2006).

			BUD	GET ITEM JU	ISTIFICATIO	N SHEET					DATE:	
					P-40						Febr	uary 2006
APPROPRIATION/BUDG	ET ACTIVITY						P-1 ITEM NO	MENCLATURE				
							BLI: 5112	NAVAL FI	RES CONTI	ROL SYST	EM	
Other Procurement,	Navy / BA-4:	Ordna	ance Suppoi	rt Equipment								
							Other Related	Program Eleme	ents			
	2004 and	ID								То	Total	
	Prior Years	Code	FY 2005 *	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	Complete	Program	
QUANTITY												
COST (\$M)	\$34.1	Α	\$3.3	\$4.3	\$3.3	\$2.4	\$2.7	\$2.4	\$2.1	CONT	\$54.6	
Initial Spares (\$M)			\$0.3	\$0.1	\$0.2	\$0.1	\$0.1	\$0.1	\$0.1			

The Naval Fires Control System (NFCS) is an automated mission planning and coordination system for Naval Surface Fire Support (NSFS) Weapons. It automates shipboard land attack battle management duties to be interoperable and consistent with joint C4ISR systems. These shipboard weapon systems significantly improve the Navy's ability to support OMFTS.

P-1 SHOPPING LIST CLASSIFICATION:
IO 99 PAGE NO 1

<sup>\*</sup> FY05 - Funding includes FY05 Congressional Add for Naval Fires Network (Gulf Coast Joint Harbor Ops Center (JHOC)

	WEAPONS SYSTEM ( P-5	COST A	NALYSIS			Weapon System DATE: February 2						
	RIATION/BUDGET ACTIVITY curement, Navy/BA-4					ID Code	P-1 ITEM NOM	MENCLATURE/S RES CONTI	SUBHEAD ROL SYSTE	M 5112 (A4		•
			TOTAL COST	IN THOUSAN	IDS OF DOLL	ARS						
COST CODE	ELEMENT OF COST	ID Code	2004 and FY 2005 Prior Years				FY 2006				FY 2007	
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
FC001	NFCS Phase I	А	5801.0	2	435.5	871.0	5	424.0	2,120.0	3	437.0	1,311.0
FC002	Installation of NFCS Equipment		1371.0	3	208.7	626.0	5	212.0	1,060.0	6	218.0	1,308.
FC007	LSS Update		15645.0									
FC008	LSS Remote Sensors	Α	5062.0									
FC009	NFCS for LSS	А	3290.0									
FC830	Production Engineering Support (NFCS)		2936.8			760.0			1,087.0			692.0
FCCA1	Gulf Coast Joint Harbor Ops Center (JHOC)					997.0						
DD FORM	2446, JUN 86		34,106			3,254 P-1 SHOPPIN	G LIST		4,267	CLASSIFICA	TION:	3,31

BUDGET PROCURE	MENT HISTO	ORY AND P	LANNING EXHIBI	Γ (P-5A)		Weapon System		A. DATE		
								F	ebruary 2	2006
B. APPROPRIATION/BUDG	ET ACTIVITY				C. P-1 ITEM NON	MENCLATURE		-	SUBHEAD	
Other Procureme	ent, Navy/E	3A-4 Ordr	nance Support	Equipment	NAVAL FI	<b>RES CONTROL SYS</b>	TEM		A	4FC
	_				5112					
					CONTRACT			DATE OF	SPECS	DATE
Cost Element/	QUANTITY	UNIT	LOCATION	RFP ISSUE	METHOD	CONTRACTOR	AWARD	FIRST	AVAILABLE	REVISION
FISCAL YEAR		COST	OF PCO	DATE	& TYPE	AND LOCATION	DATE	DELIVERY	NOW	AVAILABL
		(000)								
NFCS Phase 1										
FY2005	2	435.50	NAVSEA	OCT-04	WX	NUWC/Keyport	FEB-05	MAY-06	YES	TBD
FY2006	5	424.00	NAVSEA	JUN-05	WX	NUWC/Keyport	FEB-06	MAY-07	YES	TBD
FY2007	3	437.00	NAVSEA	OCT-06	WX	NUWC/Keyport	FEB-07	MAY-08	YES	TBD
JHOC										
FY2005	1	997.0			Various	Classified				
_				1						<u> </u>
DEMARKS										
. REMARKS										

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST

CLASSIFICATION:

BUDGET	ITEN	/I JUST	IFICATION S	SHEET			DATE:					
			P-40						Februa	ry 2006		
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NO	OMENCLAT	JRE					
Other Procurement, Navy												
BA-4: Ordnance Support Equipm	nent				Gun Fire C	Control Equ	ipment - 5	209				
Program Element for Code B Items:					Other Relate	ed Program	Elements					
		ID	FY2004								То	
		Code	and Prior	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	Complete	Total
QUANTITY												
COST												
(In Millions)	Α		\$24.7	\$10.2	\$11.0	\$7.4	\$10.7	\$5.3	\$5.5	\$5.6	CONT	CONT
SPARES COST	-		\$0.0	\$0.1	\$0.3	\$0.3	\$0.1	\$0.1	\$0.0	\$0.0	CONT	\$0.8

#### ITEM DESCRIPTION/JUSTIFICATION

**Description: (U)** This program provides for procurement of equipment, materials and Ordnance Alterations (ORDALTs) to improve combat effectiveness and maintain logistic supportability of Gun Fire Control Systems (GFCS) and procure night vision and other optical systems.

NV024 RMA (Reliability, Maintainability and Availability) MK 86 (Gun Fire Control Computing System) - Procures product Improvement ORDALTs for GFCS MK 86 and MK160 to correct problems reported by fleet units. Upgrades unreliable components and replaces obsolete components and parts no longer in production. MK 86 ORDALTs were procured in prior years and are being installed in blocks to reduce total installation costs.

NV039 Night Vision Devices - Procures new Night Vision Devices (NVD) for ships and shore sights. Provides repair or replacement of NVD and NVD Test Equipment.

**NV051 MK 46 Optical Sight Systems (OSS) Product Improvement** - Procures Product Improvements for MK 46 OSS on DDG 51 Class ships. The MK 46 OSS is an integral element of the MK 34 gun weapon system. These improvements provide enhanced force protection capabilities and reduce total ownership costs by improved reliability and supportability of in-service equipment systems.

**UK5IN/UK6IN - Installation of Equipments** - Provides funding to install ORDALTS, field changes and other alterations in ships (Fleet Modernization Program - FMP) and shore sites (Non-fleet Modernization Program - NON-FMP).

P-1 SHOPPING LIST

CLASSIFICATION:

<sup>\*\*</sup> MK 86 Fire Control System and Night Vision Devices were reassigned from BLI 511000/5/6.

# **UNCLASSIFIED**

	WEAPONS SYSTEM CO P-5	ST ANAI	YSIS									DATE:	February 2	2006
OTHER	PRIATION/BUDGET ACTIVITY R PROCUREMENT, NAVY Ordnance Support Equipment	P-1 ITEM NOMENCLATURE Gun Fire Control Equipment - BLI 5209										SUBHE		
		TOTAL COST IN THOUSANDS OF DOLLARS												
COST	ELEMENT OF COST	ID Code					FY 2005			FY 2006	5		FY 2007	
						Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
NV024 NV039	<b>EQUIPMENT</b> RMA MK 86 Night Vision Devices MK 46 OSS Product Improvement	A A						1,920 2,791 4,957			1,415 2,007 7,091			954 2,525 3,734
UK5IN UK6IN	INSTALL Installation of Eqmt FMP (RMA MK 86) Installation of Eqmt NON FMP (RMA MK 86)							477 57			361 56			104 116
	TOTAL							10,202			10,930			7,433

DD FORM 2446, JUN 86 P-1 SHOPPING LIST CLASSIFICATION

ITEM NO. 100 PAGE No. 2

	BUDGET	ITEM J	USTIFICA	TION SHEE	ĒΤ		DATE:				
			P-40						F	ebruary 200	06
APPROPRIATION/BUDG	PRIATION/BUDGET ACTIVITY  PROCUREMENT, NAVY / BA-4 Ordnance Support Equipment  Description:  Descrip										
OTHER PROCUREMEN	PROPRIATION/BUDGET ACTIVITY  HER PROCUREMENT, NAVY / BA-4 Ordnance Support Equipment  Ogram Element for Code B Items:  Other Related Program Elements  O604227N (RDT&E, N and WPN)  Prior ID Years Code FY 2005 FY 2006 FY 2007 FY 2008 FY 2009 FY 2010 FY 2011 Complete  IANTITY  1 28 27										
Program Element for Cod	de B Items:					Other Relate	d Program Ele	ements			
P-40  APPROPRIATION/BUDGET ACTIVITY  OTHER PROCUREMENT, NAVY / BA-4 Ordnance Support Equipment  Program Element for Code B Items:  Other Related Program Elements  O604227N (RDT&E, N and WPN)  Prior ID Years Code FY 2005 FY 2006 FY 2007 FY 2008 FY 2009 FY 2010 FY 2011 Complete TO  QUANTITY  1 28 27											
P-40  APPROPRIATION/BUDGET ACTIVITY  OTHER PROCUREMENT, NAVY / BA-4 Ordnance Support Equipment  Program Element for Code B Items:  Other Related Program Elements  O604227N (RDT&E, N and WPN)  Prior ID Years Code FY 2005 FY 2006 FY 2007 FY 2008 FY 2009 FY 2010 FY 2011 Complete To  QUANTITY  1 28 27 5											
Program Element for Code B Items:  Other Related Program Elements  0604227N (RDT&E, N and WPN)  Prior ID							Complete	Total			
QUANTITY					1		28	27			56
COST (\$M)		В			\$0.1	\$0.0	\$7.2	\$8.0	\$5.0	\$3.1	23.5*

#### Portable Circuit Board Programmers, (02000) (FY 2007)

Procurement of hardware to be used by NSWC, Port Hueneme to replicate Harpoon Shipboard Command Launch Control Set (HSCLCS) version 11/12 programs into Electronic Programmable Read Only Memory (EPROM's). Procurement of this hardware will support software updates to HSCLCS.

#### GPS Interface Unit (GPSIU) / NAVSSI / DL Radio/ Harpoon Guided Missile Simulator (HGMS) Ordalt Kits (02001) (FY 2009-FY2012)

The ordnance alternation (ORDALT) kit procurement will commence in FY 2009 following completion of Harpoon Block III (funded in RDT&E, N). These ORDALT kits provide a Harpoon Embedded Trainer (HET) Blk III computer. Delivery and installation of the ORDALT kits is scheduled for FY 2010 through FY2012. Additional efforts include government production support, as well as procurement and installation of Harpoon Operational Tactical Training System (HOTTS) shorebase trainers.

\*Columns may not add due to rounding

CLASSIFICATION:

BUDGET ITEM JU	JSTIFICA	TION SHE	ET FOR A	GREGATE	D ITEMS		DATE:				
		P-40a	a					F	ebruary 200	06	
APPROPRIATION/BUDGET ACTIVITY						P-1 ITEM NO	MENCLATURI				
OTHER PROCUREMENT, NAVY	/ BA-4 O	rdnance	Support Eq	uipment			rpoon Supp		ent		
,	ID	Prior	T	Ι'			T	1			
Procurement Items	Code	Years	FY 2005	FY 2006	FY 2007						
Portable Circuit Board Programmers	В										
Quantity					1						
Funding (\$K)					100						
Total P-1 Funding					100						
-											

CLASSIFICATION:

DD Form 2454, JUN 86 Item No. 101 PAGE NO. 2

			BUD	SET ITEM JUS	STIFICATION	N SHEET				DATE:		
				P	-40					February 2006		
APPROPRIATION/BUI	DGET ACT	TIVITY:			P-1 ITEM N	OMENCLAT	URE			<u>.</u>	-	
OTHER PROCUREME	NT, NAVY	<b>′</b>										
<b>BA4: ORDNANCE SUI</b>	PPORT E	QUIPME	NT				NATO SEAS	5237				
Program Element for	Code B It	ems:			Other Relat	ted Program	Elements					
					Ship Self Def	fense 060475	5N Proj 20173					
	Prior											
	Years	ID									Total	
		Code	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Complete	e Program	
US004 QUANTITY	2			1		1						
US005 QUANTITY	1			3		2						
COST (\$M)	74.0	Α	24.9	37.9	4.6	28.7	12.3	12.7	12.7	Cont	207.8	
Initial Spares (\$M)	1.1	Α	0.6	0.8	0.5	0.0	0.2	0.2	0.0	cont	3.4	

#### ITEM DESCRIPTION/JUSTIFICATION:

NATO SEASPARROW Surface Missile System (NSSMS) NATO SEASPARROW is a Self Defense AAW Shipboard Missile System.

Primary operations consist of:

- Acquiring targets from external or internal designations
- Establishing track data for Engageability Determination and Launcher/Missile Control
- Target Illumination for Missile Guidance
- Missile Firing
- Kill/Survive Assessment

Provides fully automatic operation with provisions for Operator Intervention or Override from the time of Target Designation to Missile Away. The NSSMS consists of a Fire Control System comprised of Directors, a General Purpose Digital Computer, Signal Data Converters, Transmitter Group, Operating Consoles, and an 8 Cell Launcher, which employs the surface launch variant of the Sparrow Missile. The Surface Launch Version (RIM-7) uses a Radar Homing Guidance System, with Target Illumination provided by the shipboard MK91 System Radar Directors.

When NSSMS is combined with the MK23 Target Acquisition System (TAS), they become the AN/SWY-1 Self Defense Surface Missile System for the following U.S. Navy Ships:

AOE/AORs, DD963s, Self Defense Test Ship, and shore based facilities. When the MK23 TAS is combined with RAM it becomes AN/SWY-2 on the LHA's. When NSSMS and TAS and RAM are combined it becomes the AN/SWY-3 on CV/CVNs and LHDs. The NSSMS is a NATO Cooperative Project with 12 participating Governments: Australia, Belgium, Canada, Denmark, Germany, Greece, Norway, The Netherlands, Portugal, Spain, Turkey and the United States. The NSSMS and associated systems of the Cooperative Project were developed, produced and are supported under DoD/MoD level International Memorandum of Understanding (MOU).

**FY 2005:** Funding provides for the procurement of 1 LHD ship set of MK 57 NSSMS NATO SEASPARROW Surface Missile System (NSSMS) ReArchitecture upgrade. The ESSM Ordalt to the GMLS MK 29 Trainable Launcher in support of a Fleet deployable Evolved SEASPARROW Missile (ESSM) is being procured for CVN 76. This funding also provides for the U.S. share of NSSMS consortium efforts.

**FY 2006**: Funding provides for the procurement of 1 CVN ship set of the MK57 Mod 13 NATO SEASPARROW Surface Missile System (NSSMS) ReArchitecture upgrade. It provides for engineering changes necessary to keep the NSSMS ReArchitecture upgrade current with technical change requirements and obsolescence issues. Continued production of ESSM Ordalt to the GMLS MK 29 Trainable Launcher. Discontinues the U.S. share of NSSMS consortium support.

FY 2007: Funding provides for limited production support for RNSSMS which includes engineering studies/necessary fixes as a result of Test Obsolescence issues. Installation funds are for Prior year procurements.

Installation of RNSSMS will be performed at the shipyards by IWS 3D AIT during scheduled availabilities.

DD Form 2454, JUN 86

P-1 SHOPPING LIST ITEM NO. 102 PAGE NO. 1 CLASSIFICATION:

## **UNCLASSIFIED**

	WEAPONS SYS		ANALYSIS											DATE:	ary 2006
OTHER PROC	ON/BUDGET ACTIVITY UREMENT, NAVY						P-1 ITEM NOM							SUBHEAD:	ary 2000
BA-4: ORDNAM	NCE SUPPORT EQUIPMENT		TOTAL COST	IN THOUS	ANDS OF DO		NATO SEASP	ARROW / 52	3700					A4US	
COST CODE	ELEMENT OF COST	ID Code	FY 2004 and Prior		FY 2005			FY 2006			FY 2007				
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
US003	NSSMS IMPROVEMENTS *	A				3,576									
US004	MK 91 Rearcheticture System MK91 UPGRADE MOD 10/11 SYS UPGS MOD 6/7 TO 10/11 TRANSMITTER UPGRADE (SSTX) UPGRADE LEGACY XMTR	A	<b>68,800</b> 40,100 6,000		2,000	<b>8,700</b> 2,000	1 4 4	2,485 1,553 140	22,768 2,485 6,212 560			2,166			
	AN/UYQ-70 DISPLAY CONSOLE NON RECURRING ECP'S PRODUCTION SUPPORT CVN70 NSSMS DEPOT		7,000 5,100 10,600			1,400 1,300 4,000	5	300	1,500 2,981 621 4,311 4,098			634 1,532			
US005	MK 29 GMLS ESSM ORDALT EQUIPMENT ORDALT INSTALL DEPOT ECP'S PRODUCTION SUPPORT TRAINING	A	3,900 2,000 100 800 1,000	2	1,000	3,391 2,000 691 100 600	6	626 776	10,017 3,756 4,656 104 1,165 336			476 106 370			
US5IN	EQUIPMENT INSTALLATION DSA MK 29 GMLS ESSM ORDALT		1,300			<b>9,275</b> 425	3 2	262 135	<b>5,148</b> 786 270	1	539	<b>1,940</b> 539			
	NSSMS MK 57 MOD 10/11 NSSMS MK 57 MOD 10/11 UPGRADE		1,300	1	8,850	8,850 0	1	3,569 523	3,569 523	3	467	1,401			
			74,000	)		24,942			37,933			4,582			

DD FORM 2446, JUN 86

ITEM NO. 102

PAGE NO. 2

\* Consortium funding not reflected in P-3s

# **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING	EXHIBIT (	(P-5A)				Weapon System		A. DA	TE	
		,							Februa	ry 2006
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 IT	EM NOMENCLATUR	E		SUBHEA	\D
OTHER PROCUREMENT, NAVY										
BA-4: ORDNANCE SUPPORT EQUIPMENT						ASPARROW				A4US
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
<u>FY 05</u> US004										
MK 91 REARCH UPGRADE TO MOD 10/11 21	1	LHD-2000	NAVSEA	Jan-05	FFP	Raytheon, Ports, RI	Jan-05	Jul-06	YES	
<u>US005</u> GMLS Mk29 ESSM OrdAlt - Production	2	1000	NAVSEA	Jan-05	FFP	Raytheon, Ports, RI	Jul-05	Feb-07	NO	
<u>FY 06</u> US004										
MK 91 REARCH	1	CVN-2485	NAVSEA	Jan-06	FFP	Raytheon, Ports, Ri	Mar-06	Dec-07	YES	
Transmitter Upgrade (SSTX) AN/UYQ-70 DISPLAY CONSOLE <u>1</u>	4 5	1553 300	NAVSEA NAVSEA	Jan-06 Jan-06	FFP FFP	Raytheon, Ports, RI Lockheed Martin Egan, MN	Mar-06 May-06		YES YES	
<u>US005</u>										
GMLS Mk29 ESSM OrdAlt - Production	6	626	NAVSEA	Jan-06	FFP	Raytheon, Ports, RI	Mar-06	Dec-07	NO	
<u>FY 07</u> US004/005 No Procurements										

DD Form 2446-1, JUL 87

Classification:

**UNCLASSIFIED** 

P-1 SHOPPING LIST

PAGE NO. 3 ITEM NO. 102

<sup>1 /</sup> Part of multicustomer contract thru IWS06 2 / Procures upgrades for the MK 57 MOD 6/7 on CVN 68/69/76 & LHD 7 to make them MOD 10/11

P3A	INDIVIDUAL MODIFICATION	February 2006

NATO SEASPARROW Surface Missile System TYPE MODIFICATION: Performance, Reliability and Safety MODIFICATION TITLE: NSSMS MK57 MOD 10/11

DESCRIPTION/JUSTIFICATION:

The MK 91 NATO Seasparrow ReArchitecture Program will integrate the NSSMS into the SSDS MK 2 architecture to provide an additional layer of ship missile defense. The upgrade will eliminate the analog point-to-point architecture and other deficiencies resident in the existing MK 57 NSSMS, and will allow for full exploitation of ESSM. In addition to reductions in manning realized by RNSSMS, the Solid State Transmitter Ordalt will reduce NSSMS Cost of Ownership for the fleet.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILE Milestone III, January 2000

<u> </u>	FY 200	04 & Prior	<u>F</u>	Y 2005	<u>E`</u>	Y 2006	<u>FY</u>	2007	FY	2008	<u>F</u>	<u>/ 2009</u>	<u>F</u>	Y 2010	<u>F</u>	Y 2011	<u>F</u>	<u>/ 2012</u>		<u>TC</u>	TOTAL	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
FINANCIAL PLAN (IN MI	LLION	<u>IS)</u>																				
RDT&E																						0.0
<u>PROCUREMENT</u>																						
INSTALLATION KITS																						0.0
INSTALLATION KITS -	UNIT (	COST																				0.0
INSTALLATION Kits/GN	ИLS																					0.0
EQUIPMENT	4	40.1			1	14.8	<u>1/</u>		1	11.1											6	66.0
EQUIPMENT NONREC	URRI	7.0		1.4		3.0				3.6		2.1		3.9		7.9						28.9
ENGINEERING CHANG	SE OF	5.1		1.3		0.6		0.6		0.7		0.7		0.7		0.7						10.4
System Upgrades 21	3	6.0	1	2.0																	4	8.0
TRAINING EQUIPMENT	Т									0.2												0.2
SUPPORT EQUIPMENT	Т																					0.0
ENGINEERING SERVICE	ES (Co	ontractor)								1.5	<u>1/</u>	0.6	1/									2.1
PRODUCTION SUPPOR	т	10.6		4.0		4.3		1.6		4.4		2.9		3.0		3.0						33.8
ECONOMIC ORDER QU	ANTIT	Υ																				0.0
INTERIM CONTRACTO	R SUF	PPORT																				0.0
INSTALL COST		1.3	1	9.3	1	4.8		1.4			1	4.0		4.1	1	0.0					4	24.9
TOTAL PROCUREMEN	IT	70.1		18.0		27.5		3.6		21.5		10.3		11.7		11.6		0.0		0.0		174.3

<sup>1/</sup> CVN70 procurement and associated costs were realigned from SCN to OPN

CLASSIFICATION: UNCLASSIFIED

<sup>2/</sup> Procures upgrades for the MK 57 MOD 6/7 on CVN 68/69/76 & LHD 7 to make them MOD 10/11

CLASSIFICATION: UNCLASSIFIED
P3A (Continued)

**INDIVIDUAL MODIFICATION (Continued)** 

NATO SEASPARROW Surface Missile System MODIFICATION TITLE: NSSMS MK57 MOD 10/11/12/13 INSTALLATION INFORMATION: METHOD OF IMPLEMENTATION: S/A 8741/SCD1164/200/201/TBD PRODUCTION LEADTIME: ADMINISTRATIVE LEADTIME: 3 Months 18 Months CONTRACT DATES: FY 2005: 01/05 FY 2006: 01/06 FY 2007: 01/07 FY 2006: 07/07 DELIVERY DATE: FY 2005: 07/06 FY 2007: 07/08 (\$ in Millions) FY2004 & Prior FY 2005 FY 2006 FY 2007 FY 2009 FY 2011 FY 2008 FY 2010 FY 2012 To Complete Cost: Total Qtv Qt Qty Qty Qty \$ Qty Qty Qty \$ Qty Qty Qty \$ Qty \$ PRIOR YEARS 1/2/ 0.9 2 0.9 3 1.8 FY2005 EQUIPMENT 1/ 2/ 1 0.5 0.3 8.0 PRIOR YEARS 1/ 1.3 3.6 1 [\$7M] 0.0 14.2 FY 2005 EQUIPMENT 1/ 0.0 FY 2006 EQUIPMENT 1/ 3.7 3.7 FY 2007 EQUIPMENT 1/ 0.0 FY 2008 EQUIPMENT 1/ 0.0 0.3 4.1 4.4 FY 2009 EQUIPMENT 0.0 FY 2010 EQUIPMENT 0.0 FY 2011 EQUIPMENT 0.0 0 TOTAL 2/ 1.3 9.3 4.8 0.0 4.0 0 0.0 0.0 24.9 1.4 INSTALLATION SCHEDULE: FY 2004 FY 2011 FY 2005 FY 2007 FY 2008 FY 2010 FY 2012 FY 2006 FY 2009 2 3 2 3 2 3 2 3 2 3 2 3 4 TOTAL & Prior 2 3 4 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 1 0 In 0 0 0 0 0 0 0 Out 0 0 0 0 0 1/ Design Service Allocation (DSA) planning \$ for installation begin in year of procurement with full installation funding 2 years after procurement 2/ Total quantity does not include REARCH upgrades of CVN 68, 69, 76 from REARCH MOD 7 to MOD 11 & LHD7 from MOD 6 to MOD 10

February 2006

P-1 SHOPPING LIST ITEM NO.102 PAGE NO. 5

CLASSIFICATION: UNCLASSIFIED

P-3A

CLASSIFICATION: C	DIACE	_AJJII	ILD																			
РЗА		INDIVIDUA	AL MO	DIFICAT	TION															Fe	ebruary 20	06
NSSMS MK 29 Guideo	d Missile	e Launching	SYS	ΈM	_	TYPE M	ODIF	ICATIO	N:	Perform	ance		_			MODIFIC	CATIO	N TITLE	: <u>MK 2</u>	9 GMLS ES	SM ORDALT	
DESCRIPTION/JUSTIFICATION:  The objective of this modification is a cost-ef	footivo.	adution to n	rotoot	CV/No.1/	\\\/ +b	o Novado	Moriti	mo Fore	o Drot	ootion /N	4ED) s	roarom f	or obj	in'a aalf d	ofono	o ogoinat	the fut	tura thra	ot of o	volvina Anti	Chin Cruina I	Aissiles
(ASCMs). The Navy's MFP plan calls for the																						
trainable launcher. In conjunction with ESSM																						
Congress.																						
DEVELOPMENT STATUS/MAJOR DEVELO	PMENT	MILESTO	NES:		Mile	stone III,	Janu	ary 2000	)			-										
	FY 20	04 & Prior	F	Y 2005	E	Y 2006	<u>F</u> )	2007	FY	2008	F	Y 2009	F`	Y 2010	E	Y 2011	<u>F)</u>	<u> 2012</u>		<u>TC</u>	TOTAL	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E		6.8		3.0																	0	9.8
<u>PROCUREMENT</u>																						
INSTALLATION KITS																					0	0.0
INSTALLATION KITS - UNIT COST																					0	0.0
INSTALLATION Kits/GMLS																					0	0.0
EQUIPMENT	2	2.0	2	2.0	6	3.8			4	2.6											14	10.4
ORDALT INSTALL @ DEPOT 1	/		4	0.7	6	4.7			4	3.2											14	8.6
EQUIPMENT NONRECURRING																0.6					0	0.6
ENGINEERING CHANGE ORDERS		0.1		0.1		0.1		0.1		0.1		0.1		0.1		0.1		0.0			0	0.8
																					0	0.0
TRAINING EQUIPMENT	1	1.0				0.3															1	1.3
SUPPORT EQUIPMENT																					0	0.0
ENGINEERING SERVICES (Contractor)																					0	0.0
PRODUCTION SUPPORT		0.8		0.6		1.2		0.4		0.4		0.4		0.4		0.4		0.0			0	4.6
ECONOMIC ORDER QUANTITY																					0	0.0
INTERIM CONTRACTOR SUPPORT																					0	0.0
INSTALL COST						0.3	4	0.5	4	0.9	2	0.5	2	0.5	2	0.0					14	2.7
TOTAL PROCUREMENT		3.9		3.4		10.4		1.0		7.2		1.0		1.0		1.1		0.0		0.0		29.0

P-1 SHOPPING LIST ITEM NO. 102 PAGE NO. 6 CLASSIFICATION:

TOTAL PROCUREMENT 3.9

1/ ORDALT Installtion accomplished via turnaround program at depot

# CLASSIFICATION: UNCLASSIFIEID P3A (Continued)

#### **INDIVIDUAL MODIFICATION (Continued)**

February 2006

NSSMS MK 29 Guided Missile Launching SYSTEM

MK 29 GMLS ESSM ORDALT MODIFICATION TITLE:

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME:

Shipyard/AIT

3 Months

PRODUCTION LEADTIME:

15 Months

FY 2007: FY 2007:

01/07

04/08

CONTRACT DATES: DELIVERY DATE:

FY 2005: FY 2005: 01/05 04/06 FY 2006: FY 2006: 01/06 04/07

										(\$ in M	llions	5)										
Cost:	FY20	04 & Prior	F	Y 2005	F	Y 2006	ı	FY 2007		FY 2008		FY 2009	F	Y 2010	F	FY 2011		To C	omplete			Total
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$ Qty	\$		Qty	\$
FY 2004 & PRIOR YEAR						0.3	2	0.5													2	0.8
FY 2005 EQUIPMENT									2	<u>1/</u> 0.0	)										2	0.0
FY 2006 EQUIPMENT									4	0.9	2	0.5									6	1.4
FY 2007 EQUIPMENT																					0	0.0
FY 2008 EQUIPMENT													2	0.5	2	0.0					4	0.5
FY 2009 EQUIPMENT																					0	0.0
FY 2010 EQUIPMENT																					0	0.0
FY 2011 EQUIPMENT																					0	0.0
TOTAL						0.3	2	0.5	6	0.9	2	0.5	2	0.5	2	0		0		0.0	14	2.7

1/ CVN 73 Full Forward deployment installation not funded in FY 08 INSTALLATION SCHEDULE

	INSTALLA	110N 2	CHEDUL	<u>. E : </u>																										
	FY 2004		FY	2005			FY 20	006			FY:	2007			FY	2008			FY 2	009			FY 2	2010			FY 2	2011		
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1_	2	3	4	1	2	3	4	1_	2	3	4	1
In	0	0	0	0	0	0	0	0	0	0	0	2	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0	2	0	0
Out	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	2	0	0	0	2	0	0	2	0	0	0	0	2

4	1	2	3	4		TOTAL
0	0	0	0	0	0	12
0	2	0	0	0	0	12

FY 2012

CLASSIFICATION: UNCLASSIFIED

<u>TC</u>

P-3A

		BU	DGET ITEM JUSTIFICA	TION SHEET				DATE:			
			P-40					<b>FEBRUARY</b>	2006		
APPROPRIATION/BU						P-1 ITEM NOM	IENCLATURE				
<b>BA-4: ORDNANC</b>	E SUPPORT E	QUIPME	NT				Rollir	ng Airframe N	lissile (RAM)	5238	
Program Element for	Code B Items:					Other Related	Program Eleme	nts			
	Prior Years	ID Code	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Complete	Total
QUANTITY	73	А	1	1	0	0	0	0	0	0	75
COST (In Millions)	575.7	А	26.8	25.7	10.0	9.0	8.6	8.8	8.9	0.0	673.4
SPARES COST (In Millions)	3.8	А	0.0	0.3	0.0	0.2	0.0	0.0	0.0	0.0	4.3

#### ITEM DESCRIPTION/JUSTIFICATION:

#### Rolling Airframe Missile (RAM) - MK-49 Guided Missile Launching System (GMLS)

RAM is a cooperative project with the Federal Republic of Germany, produced under a series of production MOUs/MOAs executed between the U.S. and the Federal Republic of Germany. The latest was signed on 18 December 2001.

The MK-31 Guided Missile Weapon System (GMWS) is a lightweight, quick-reaction, high firepower missile system designed to provide anti-ship missile defense. The system is comprised of a MK-44 Guided Missile Round Pack (GMRP) and the MK-49 Guided Missile Launching System (GMLS), which holds 21 RAM missiles. The 21-round launcher is compatible with various platforms ranging from large USN aircraft carriers to S-143 type German patrol boats. This system is designed to counter high density anti-ship cruise missile raids and provide for ship survivability with accurate terminal guidance, proven lethality and no fire control channel dependence.

Approval for Full Rate Production was granted 6 May 1993. The total RAM GMLS procurement program is 165 launchers (73 OPN (including one trainer and one LBTF), 39 SCN, and 53 German systems). One hundred eight launchers (56 OPN, 9 SCN and 43 German) were procured in FY99 and prior, under joint U.S./German production contracts. A five year multi-year contract for 41 systems (17 OPN and 24 SCN) was awarded in FY00; 10 German systems were added to the multi-year in April 2002; and 6 SCN launchers are scheduled for procurement outside the multi-year contract. Additionally, two SEARAM configured systems were procured with Congressional adds (one in FY05 and one in FY06). The SEARAM configuration, which holds 11 RAM missiles, provides Anti-Air Warfare and Anti-Surface Warfare mission capability with a multi-spectral detect, control and engage system.

P-1 SHOPPING LIST

DD Form 2454, JUN 86

ITEM NO. 103 PAGE NO. 1

CLASSIFICATION:

BUDGET ITEM JUSTIFICATION SHEET

P-40 (CONTINUATION)

APPROPRIATION/BUDGET ACTIVITY

OTHER PROCUREMENT, NAVY

BA-4: ORDNANCE SUPPORT EQUIPMENT

DATE:

FEBRUARY 2006

P-1 ITEM NOMENCLATURE/LINE ITEM #

Rolling Airframe Missile (RAM) 5238

RAM is installed on or planned for installation on the following ship classes:

<u>CLASS</u>	<u>SHIPS</u>	<u>LAUNCHERS</u>
LHA (OPN)	5	10
LSD (OPN)	11	23 (LSD-52 (1 OPN & 1 SCN))
DD-963 (OPN)	11	11
LHD (OPN)	4	8
CV (OPN)	2	4
CVN (OPN)	7	15
TRAINER (OPN)**		1
LBTF-1 (OPN)**		<u> </u>
OPN TOTAL	40	73 **(Only 71 shipboard installations)
LHA-R (SCN)	1	2
LSD (SCN)	1	1 (LSD-52 (1 OPN & 1 SCN))
LHD (SCN)	4	8
CVN (SCN)	4	8
LPD-17 (SCN)	10	20_
SCN TOTAL	20	39

FY05 SEARAM configuration will be an FFG (OPN) installation.

FY06 SEARAM configuration will be an LCS (OPN) installation.

NSWC Port Hueneme provides installation oversight support as the ISEA for the RAM system.

DD Form 2454, JUN 86

CLASSIFICATION: UNCLASSIFIED

	WEAPONS SYSTEM CO P-5	ST ANAL	YSIS			Weapon Sy	/stem						FEBRUAR	Y 2006	
OTHER	PRIATION/BUDGET ACTIVITY PROCUREMENT, NAVY					ID Code			ATURE/SUBI				SUBHEAD		
BA-4: C	ORDNANCE SUPPORT EQUIPMENT	1	l						E MISSILE (R IN THOUSA					A4UR	
							10	TAL COST	IN THOUSA	ND3 OF D	OLLARS				
COST	ELEMENT OF COST	ID	Prior					FY 2005	;		FY 2006			FY 2007	
CODE		Code	Years		1	1					T	· - · -		1	1 =
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
UR006	RAM MK-49 GMLS (Annual Procurement)	А	274,239												
	Multiyear RAM MK-49 GMLS	A	67,160												
	Multiyear RAM EOQ Material	Α	0												
	RAM 11 Round GMLS	Α	5,543												
UR006	RAM ECP's	Α	42,595						1,429			1,084			1,350
UR006	RAM GMLS ORDALTS	Α	25,324							3	898.33	2,695			
URCA1	SEARAM GMLS	Α	0				1	4,000	4,000	1	8,400	8,400			
UR777	RAM ENGINEER SERVICES (Contractor)	Α	34,960						3,181			3,011			3,071
UR007	RAM GMLS PRODUCTION SUPPORT	Α	44,352						4,209			3,038			3,105
UR900	RAM - CSS	Α	9,089						624			560			573
	RAM GMLS/ORDALT Install (Non-FMP)	Α	1,793						750			808			388
UR5IN	RAM GMLS AIT Install (FMP)	Α	70,655						12,591			6,061			1,500
	<u> </u>	ı	575,710						26,784			25,657			9,987
-			,			P-	1 SHOPPING	G LIST	-,			CLASSIFIC		UNCLASSI	

P-1 SHOPPING LIST ITEM NO. 103 PAGE NO. 3

SUDGET PROCUREME	NT HISTOR	RY AND PL	ANNING EXHIBIT	(P-5A)		Weapon System		A. DATE		
					•			•	BRUARY	2006
. APPROPRIATION/BUDGET A DTHER PROCUREMEN BA-4: ORDNANCE SUF	T, NAVY	UIPMENT			C. P-1 ITEM NON	IENCLATURE RFRAME MISSILE (RAN	M) 5238		SUBHEAD <b>A4</b>	UR
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
URCA1 FISCAL YEAR (05) SEARAM System URCA1	1	4,000	NAVSEA	09/04	SS/CPFF	Raytheon Company, Louisville, KY	01/05	09/06	YES	
FISCAL YEAR (06) SEARAM System	1	8,400	NAVSEA	02/06	SS/CPFF	Raytheon Company, Louisville, KY	06/06	02/08	YES	
). REMARKS										

DD Form 2446-1, JUL 87

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

ROLLING AIRFRAME MISSILE (RAM) TYPE MODIFICATION: MK-49 GMLS MODIFICATION TITLE:

Milestone III. January 2000

DESCRIPTION/JUSTIFICATION:

The Rolling Airframe Missile is a lightweight, quick-reaction, high firepower missile system designed to provide anti-ship missile defense. The system (MK-31 GMWS), is comprised of the MK-44 Guided Missile Round Pack (GMRP) and the MK-49 Guided Missile Launching System (GMLS), which holds 21 RAM missiles. The 21-round launcher is compatible with various platforms, ranging from large USN amphibious assault ships to S-143-type German patrol boats. This system is designed to counter high density anti-ship, cruise missile raids and provide for ship survivability with accurate terminal guidance, proven lethality and no fire control channel dependence. The SEARAM configuration, which holds 11 RAM missiles, provides Anti-Air Warfare and Anti-Surface Warfare mission capability with a multi-spectral detect, control and engage system.

DEVELOPMENT STATOS/MAJOR DEVELO	OFIVIEINI	WILESTON	NES.		MIIIES	ione III, J	ariuary	2000				•										
	FY 20 QTY	04 & Prior \$	QTY	\$	<u>F`</u> QTY	Y 2005 \$	<u>FY</u> QTY	2006 \$	<u>FY</u> QTY	<u>/ 2007</u> \$	<u>FY</u> QTY	2008 \$	<u>FY</u> QTY	<u>2009</u> \$	<u>FY</u> QTY	<u>2010</u> \$	<u>FY</u> QTY	2011 \$	QTY	<u>TC</u> \$	TC QTY	OTAL \$
FINANCIAL PLAN (IN MILLIONS)	QIII	Ψ	QIII	, , , , , , , , , , , , , , , , , , ,	Q I I	Ψ	QIII	Ψ 	QIII	Ψ	QII	Ψ	QIII	Ψ	QII	Ψ	QII	Ψ	QII	Ψ	QII	Ψ
RDT&E																						
<u>PROCUREMENT</u>																						
INSTALLATION KITS	38	27.2			0	0.8	3	3.5	0	0.4	2	1.9	1	1.3	2	2.1	0	0.3	0	0.0	46	37.4
INSTALLATION KITS - UNIT COST		0.7				0.0		0.9		0.0		0.9		1.0	0	1.0		0.0		0.0		
INSTALLATION Kits/GMLS		1.8				0.8		0.8		0.4		0.0		0.3		0.2		0.3		0.0		4.6
EQUIPMENT	73	346.9			1	4.0	1	8.4		0.0		0.0		0.0		0.0		0.0			75	359.3
EQUIPMENT NONRECURRING																						
ENGINEERING CHANGE ORDERS		42.6	-			1.4		1.1		1.4		1.0		1.0		1.0		2.2				51.8
TRAINING EQUIPMENT																						
SUPPORT EQUIPMENT																						
ENGINEERING SERVICES (Contractor)		35.0				3.2		3.0		3.1		2.3		2.4		2.4		2.5		0.0		53.9
PRODUCTION SUPPORT		44.4				4.2		3.0		3.1		3.2		3.3		2.6		3.2		0.0		67.0
ECONOMIC ORDER QUANTITY		0.0				0.0		0.0		0.0		0.0		0.0		0.0		0.0				0.0
INTERIM CONTRACTOR SUPPORT		9.1				0.6		0.6		0.6		0.6		0.6		0.6		0.6		0.0		13.3
INSTALL COST	61	70.7			6	12.6	3	6.1	1	1.5		0.0		0.0		0.0		0.0			71	90.8
TOTAL PROCUREMENT		575.7				26.8		25.7		10.0		9.0		8.6		8.8		8.9		0.0		673.4
							P-	1 SHO	PPING	LIST						CLAS	SIFIC	ATION	: UNC	CLASSI	FIED	

P-1 SHOPPING LIST ITEM NO. 103 PAGE NO. 5

P3A (Continued)	)				INDI	/IDUA	L MO	DIFICA	TION (	Conti	nued)										FE	BRU	ARY:	2006	<b>)</b>			
																					MODIFIC	CATIO	N TITL	E:	RAN	/ MK-49	GMLS	
NSTALLATION	INFORM	ATIO	N:																									
METHOD OF IM	IPLEMEN	TATI	ON:		Ship	yard/A	ΑIT																					
ADMINISTRATI\				7 M	onths	•		PRODU	ICTIO	N LEA	DTIME	:		21	Mon			_,										
CONTRACT DA			FY 2005:			1/05		_		2006:		6/06				2007:		N/A										
DELIVERY DAT	E:		FY 2006:			9/06		_	۲١	2007:		2/08	3		FY 2	2008:		N/A	<u> </u>									
														Millions)														
Cost:			004 & Prior	-	1	•		Y 2005	-	FY 20	_		FY 20			Y 200			Y 2009		FY 2010		2011			omplete		Total
		Qty	\$	Qty		\$	Qty	\$	Qty	/	\$	Qty		\$	Qty	(	\$	Qty	\$	Qty	\$	Qty	- ;	\$	Qty	\$	Qty	\$
FY04 & PRIOR	YEAR	61	70.7				6	12	6	3	6.1	1		1.5													71	\$90.8
FY 2005 EQUIP	PMENT																											
FY 2006 EQUIF	PMENT																											
FY 2007 EQUIF	PMENT																											
FY 2008 EQUIF	PMENT																										$\sqcup$	
FY 2009 EQUIF	PMENT																											
FY 2010 EQUIP	PMENT																											
FY 2011 EQUIF	PMENT																											
TOTAL		61	70.7				6	12	6	3	6.1	1		1.5	0		0.0	0	0.	0 0	0.	0 0		0.0	0		71	90.8
INSTALLATIO	ON SCHE	DUI F	<b>:</b> -																									
	Y 2004		FY 2005	5			FY 2	006	ПП	FY	2007			FY 2	008			FY	2009		FY 2010	)		FY	2011		<u>TC</u>	
	& Prior	1	2	<u>-</u> 3	4	1		3 4	1	2	3	4	1	2	3	4	1	2	3 4	1 1	2 3	-	1	2	3	4		TOTAL
In	61	3	3	0	0	2	0	0 1	1		0	0	0	0	0	0	0	0	0 0	0	0 0		0	0	0	0	0	71
Out	61	0	3	3	0	0	2	0 0	_	1	0	0	0	0	0	0	0	0	0 0	0	0 0	0	0	0	0	0	0	71
No	ote: Does	not ir	nclude SEAR	RAM in	stalla	tions p	rovide	ed as GF	E to t	he pert	inent S	HAP	M for i	nstallati	ion. I	nform	ation s	show	n above is	for ins	stallation of	RAM	Launc					
																								P-3A				
													P-1	SHOPE	PING	LIST						CI	ASSI	FIC4	ATIO	N: UNC	LASS	IFIFD

P-1 SHOPPING LIST ITEM NO. 103 PAGE NO. 6

FY 2006 BUDGET PRODUCT	ION SC	HEDL	JLE, F	P-21														DATE	FEE	BRL	JAF	RY 2	200	6						
APPROPRIATION/BUDGET AC													We	apor		sten	1	P-1	ITEN	ΛNC	OME	NC	LAT	URE	=					
OTHER PROCUREMENT, NA\	/Y/BA-4	l: ORI	NAN	CE SU	JPPO	RT E								R/	MA				1 MK-4		MLS									
							Pro	ducti	on F	Rate									adtin								T			
Item	1		nufactu and L	urer's .ocatio	n	MS	SR	1-8	-5	MA	λX		LT P			.T A Oct	fter 1		Initial fg PL			er fg P	LT		Tota	al			nit of asur	
RAM MK-49 GMLS	Raythe	eon Cor	npany,L	_ouisville	e, KY	8		12		24									21			21						<u> </u>		
SEARAM Systems	Raythe	eon Cor	mpany,L	_ouisville	e, KY	8		12		24									21			21			_					
																								-						
											FISC	AL YI	EAR 2	004								FISC	CAL Y	EAR	2005					
ITEM / MANUFACTURER	F	s	Q	D	В		1						CALE	NDAR	YEAF	R 200	4						CA	LEND	AR Y	EAR 2	2005			1
	Y	C	T Y	E L	A L				J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	T N	A U G	S E P	B A L
RAM MK-49 GMLS (Multiyear)	02	N	4	2	2				1	1																				0
RAM MK-49 GMLS (Multiyear)	03	N	6	0	6																1	1	1	1	1	1				0
RAM MK-49 GMLS (Multiyear)	04	N	2	0	2																				_					2
SEARAM Systems	05	N	1	0	1																Α				<u> </u>					1
										FISC	AL YE	AR 2	2006									FISC	CAL Y	EAR	2007					l
ITEM / MANUFACTURER	F Y	S V C	Q T Y	D E L	B A L	O C T	005 N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	JAZ	F E B	M A R	Α	M A Y	J U N	J U L	A U G	S E P	B A L
RAM MK-49 GMLS (Multiyear)	04	N	2	0	2	1	1																							0
SEARAM Systems	05	N	1	0	1												1								$\vdash$			<u> </u>		0
SEARAM Systems	06	N	1	0	1									Α											<u> </u>			<u> </u>		1
Remarks:		<u> </u>	<u> </u>	1	<u> </u>																			<u> </u>				<u> </u>		

#### **UNCLASSIFIED**

		BUDG	ET ITEM JUS	STIFICATION	SHEET			DATE:				
			P	-40						February 2006		
APPROPRIATION/BUE	OGET ACTIVI	TY				P-1 ITEM NOM	ENCLATURE					
OTHER PROCURE	MENT, NA	VY/BA	4				SHI	P SELF DEF	ENSE SYSTE	M (SSDS) /	5239	
Program Element for C	ode B Items:					Other Related I	Program Elemei	nts				
						P.E. 060475	5N / 060358	2N / 0604307	N / 0204413N	1		
	FY2004	ID								То	То	
	And Prior	Code	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	Complete	Total	
QUANTITY	22	A/B	1	5	5	4	5	3	3	8	56	
COST												1
(In Millions)	277.9	A/B	37.8	29.0	56.7	47.4	71.4	54.4	80.1	298.2	952.8	l
SPARES COST												
(In Millions)	15.6		0.5	0.0	1.4	1.1	2.5	2.1	3.5	Cont.	Cont.	

SHIP SELF DEFENSE SYSTEM (SSDS) MK 0, RAPID ANTI-AIR SHIP MISSILE INTEGRATED DEFENSE SYSTEM (RAIDS) is on board DD 963/FFG 7 class ships and provides decision support to weapons systems operators and managers. Commercial Off the Shelf technology refresh upgrade completed in FY04.

SSDS MK 1 provides ship self defense capabilities against Anti-Ship Cruise Missiles (ASCM) for LSD 41/49 class ships. It integrates several existing stand-alone sensor and Anti-Air Warfare weapons systems to provide an automated detect-to-engage capability against low flying, high speed ASCMs with low radar cross sections in the littoral environment. System design emphasizes physically distributed non-developmental items, commercial standards, Next Generation Computer Resources, and computer program reuse in an open architecture computer network. It includes a command table that uses components of the Navy's AN/UYQ-70 standard display for human-machine interface, commercially available local area network access units and circuit cards, and commercially available fiber optic cabling. SSDS MK 1 requires a COTS obsolescence effort and transition to Open Architecture (OA) Category 3 beginning in FY07, thus providing the LSD class ships with a compatible equipment suite to host the OA track manager and other OA functions.

SSDS MK 2 provides ACDS functionality and MK1 capabilities with additional weapon and sensor elements. It is integrated with CEC to improve joint interoperability for Aircraft Carriers and Amphibious Ships. It provides enhanced capabilities for Force Protection against air, surface, and subsurface threats using both own-ship and remote data in support of the AAW Capstone Requirements. MK2 increases operational capabilities, improves combat readiness and Battle Group interoperability, and promote standardization both within installed ship classes and with AEGIS to facilitate transition to Common Command and Decision. SSDS MK 2 also equips backfit LHDs and CV(N)s with an upgraded Combat System Display Suite which includes AN/UYQ-70s, Automatic Status Boards (ASTABS), Remote ASTAB Controllers and Advanced Sensor Distribution System (ASDS). A shore based SSDS MK 2 equipment suite and a full combat system suite is installed at the Ship Combat System Center (SCSC). In FY03/FY04 procurement funded the CVN 68, LHD 7, Self Defense Test Ship (SDTS), CV 67, and CVN 74 ships, of which three are ACDS Block 1 Ships and require immediate replacement. In FY05, the CVN 73 full equipment suite is procured and will be installed in FY07 per Capstone Systems Installation letter dated 21 Apr 05. FY06-FY11 COTS Conversion Kits are planned for CV/CVN's/LPD's/LHD's/LSD's and LHA's.

Common Network Interface (CNI) As the Navy embarks on Navy Open Architecture (OA), CNI has been selected for CDS upgrade on the LHA/LHD ship class. Engineering efforts initiated via direction from OSD in FY04/05. The program's development includes an at-sea demonstration scheduled for September 06. Production commences in FY07 with installation spirals planned in FY08 for the LHA and LHD class ships. Future software and hardware modifications are planned for FY07 and out. CNI is a Commercial Off The Shelf (COTS) open interface system transitioning to an upgrade that modernizes Combat Systems on legacy amphibious ships, LHA/LHD classes, which will support the Expeditionary Strike Group (ESG). CNI upgrades the existing system using COTS hardware and common interoperable software compliant with the Navy's Open Architecture standards to integrate the data from ship's sensors, external links, and FORCEnet sources into an operational primarily software upgrades, an integrated Air, Surface, ISR, and friendly shore position and situational awareness track picture. CNI will allow for the implementation of the Joint Track Manager via the OA Track Manager (OATM) and FORCEnet and Network centric connectivity.

Amphibious Assault Direction System (AADS) or AN/KSQ-1 integrates the Position Location Reporting System (PLRS) or Enhanced PLRS (EPLRS) systems with NAVSTAR Global

PAGE NO. 1

Positioning System (GPS) via a Global Positioning System Interface Unit (GPSIU) to form a jam/intercept resistant, command and control system which supports the surface assault ship-to-shore movement in amphibious operations. An airborne relay group extends the system range over the horizon to 100 nautical miles. By computing Position Location Information (PLI) for each participant in the PLR / EPLRS net, AADS provides the capability, in near real-time to locate, identify, track, communicate with and control all craft, vehicles and personnel in the net during operations afloat and ashore.

Combat Direction System (CDS) COTS Obsolescence is funded and becomes prominent in FY06-FY11. In addition to SSDS, this includes Advance Combat Direction Systems (ACDS) variants. These variants will be required to maintain COTS as parts become obsolete or replacements are needed.

This P-1 line item supports a multitude of Commercial Off The Shelf (COTS) based systems used within the combat system.

P-1 SHOPPING LIST 104

CLASSIFICATION:

DD Form 2454, JUN 86

# **UNCLASSIFIED**

	WEAPONS SYSTEM	COST	ANALYSIS			Weapon Sy	stem						DATE:	
ADDDOD	P-5 RIATION/BUDGET ACTIVITY					ID Code	D 4 ITEM N	IOMENCLATU	DE/CLIDLIEA				Februa	ry 2006
	ocurement, Navy/BA4					ID Code	P-I II EIVI N	IOMENCLATO	KE/SUBHEAL	J				
	oddenient, Navyibaa					A/B	SHIP SEI	LF DEFENS	E SYSTEM	(SSDS)	A4UQ / 5239	)		
			TOTAL COST IN	THOUSAN	DS OF DOLLA	RS				(				
					=>/			= 1/2222		ı				
COST	ELEMENT OF COST	ID Code	FY2004 And Prior		FY 2005			FY 2006			FY 2007			
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Unit Cost	Total Cos
	EQUIPMENT	Α												
UQ001/8	SSDS FULL SHIP SYSTEM SUITE / DISPLA	 YS												
3 000 170	LSD	İ	47,863	0	0	0	0	0	0	0	0	0		
	LHD		9,489	0	0	0	0	0	0	0	0	0		
	CV(N)		37,720	1	16,812	16,812	0	0	0	0	0	0		
	SHOREBASED		41,285	0	0	0	0	0	0	0	0	0		
	SUPPORT EQUIPMENT		14,925	0	0	0	0	0	0	0	0	0		
UQ002	SSDS PRODUCTION SUPPORT		35,840			1,987			1,328			1,401		
UQ003	SSDS ECP		3,414			0			159			162		
UQ004	SSDS TRAINING		13,797			1,397			584			595		
JQ005	SSDS COTS CONVERSION KITS (Note 1)		21,592											
	COTS ENG					1,642			3,300			779		
	LHA LSD								2,500					
	LHD													
	CVN											7,430		
	LPD											5,840		
	SHOREBASED											20,030		
UQ009	COMMON NETWORK INTERFACE (CNI)	В												
	LHA		0	0	0	0	0	0	0	1	3,063	3,063		
	LHD		0	0	0	0	0	0	0	0	0	0		
UQ010	AMPHIBIOUS ASSAULT DIRECTIONAL	Α												
	SYSTEM (AADS)		0	0	0	0	5	1,911	9,554	4	1,771	7,085		
	INSTALL													
UQ51N	SSDS EQUIPMENT INSTALL (FMP)		36,909			11,130			9,535			4,390		
JQ7IN	CNI EQIPMENT INSTALL (FMP)		0			0			0			1,293		
UQ8IN	AADS EQUIPMENT INSTALL (FMP)		0			0			2,000			3,500		
UQ6IN	EQUIPMENT INSTALL (NON-FMP)		10,085			4,865			0			1,100		
	FY 02 Cong. Add for NULKA Decoys		5000											
	Remarks:													
	Note 1: PB07 is the first time COTS Conversi	on Kits	are broken out for	FY05 and o	ut.									
		22	277,919	1		37,833	5		28,960	5		56,668		
D FOD14	2446 JUN 86		OPPING LIST 10	4		,						CLASSIFICA		1

PAGE NO. 2

DD FORM 2446, JUN 86 P-1 SHOPPING LIST 104

CLASSIFICATION:

**UNCLASSIFIED** 

BUDGET PROCURE	MENT HIST	ORY AND PI	LANNING EXHIBI	T (P-5A)		Weapon System		A. DATE		
									February 20	006
3. APPROPRIATION/BUDGE	T ACTIVITY				C. P-1 ITEM NO	MENCLATURE		-	SUBHEAD	
Other Procurement,	Navy/BA4								A4	UQ
					SHIP SELF	DEFENSE SYSTEM (SSI	DS) / 523	9		
					CONTRACT			DATE OF	SPECS	DATE
Cost Element/	QUANTITY	UNIT	LOCATION	RFP ISSUE	METHOD	CONTRACTOR	AWARD	FIRST	AVAILABLE	REVISIONS
FISCAL YEAR		COST (000)	OF PCO	DATE	& TYPE	AND LOCATION	DATE	DELIVERY	NOW	AVAILABLE
UQ001										
FISCAL YEAR (05)				N/A	FFP	RAYTHEON	12/04	12 mos.	YES	N/A
CVN	1	16,812	NAVSEA			8680 Balboa Avenue		after		
		(Note 1)				San Diego CA 92123		award		
			NAVSEA	N/A	FFP	LOCKHEED MARTIN	VARIOUS	VARIOUS	YES	N/A
UQ005										
FISCAL YEAR (06)			NAVSEA	N/A	FFP	NAVSEA/DN	02/06	12 mos.	NO	12/04
LHA	LOT	2,500				Norfolk, VA		after		
		(Note 2)			FFP	DRS TECHNOLOGIES		award		
						Parsippany, NJ				
					FFP	LOCKHEED MARTIN				
						Bethesda, MD				
FISCAL YEAR (07)			NAVSEA	N/A	FFP	NAVSEA/DN	01/07	12 mos.	NO	12/04
CVN	LOT	7,430				Norfolk, VA		after		
LPD	LOT	5,840		N/A	FFP	DRS TECHNOLOGIES	01/07	award	NO	12/04
Shore Base	LOT	5,008				Parsippany, NJ				
(Note 3)		(Note 2)		N/A	FFP	LOCKHEED MARTIN	01/07	12 mos.	NO	12/04
						Bethesda, MD		after		
				10/06	CPIF	RAYTHEON	2/07	award	NO	12/04
						San Diego CA				

#### D. REMARKS

Government Furnished Equipment (GFE) is included with unit cost above.

Note 1: Unit Cost represents Full Equipment Suite

Note 2: Unit Cost represents COTS Conversion Upgrade Kits

Note 3: Shore Based COTS procurement Qty is 4 for a total of \$20,030 which matches P5

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST 104 Classification:

PAGE NO. 3 UNCLASSIFIED

BUDGET PR	OCUREME	NTHISTO	RY AND PL	ANNING E	EXHIBIT (P-5A)	Weapon System		A. DATE		
					1			F	ebruary 20	06
. APPROPRIAT					C. P-1 ITEM NOME	NCLATURE			SUBHEAD	
Other Prod	curement	, Navy/B	A-4		SHIP SELF DE	EFENSE SYSTEM (SSDS) / 5	5239			
					(AADS Units)					A4UQ
					CONTRACT			DATE OF	SPECS	DATE
Cost Element/	QUANTITY	UNIT	LOCATION	RFP ISSUE	METHOD	CONTRACTOR	AWARD	FIRST	AVAILABLE	REVISIONS
FISCAL YEAR		COST (000)	OF PCO	DATE	& TYPE	AND LOCATION	DATE	DELIVERY	NOW	AVAILABLE
MPHIBIOUS ASS	SAULT DIRECTI	ONAL SYSTEM	(AADS)							
UQ010 FY 2006										
AADS	5	1,911	NAVSEA	03/05	FFP	Army, Ft Monmouth, NJ	10/05	07/06	Yes	
				03/05	FFP	Raytheon, Fullerton, CA	10/05	07/06	Yes	
				VAR	FFP	Various	VAR	VAR	Yes	
UQ010 <i>FY 2007</i>										
AADS	4	1,771	NAVSEA	03/06	FFP	Army, Ft Monmouth, NJ	10/06	05/07	Yes	İ
				03/06	FFP	Raytheon, Fullerton, CA	10/06	05/07	Yes	
				VAR	FFP	Various	VAR	VAR	Yes	

DD Form 2446-1, JUL 87

Classification:

ITEM NO. 104

FY2006-2007 Acquisitions will be competitively awarded. Multiple Awards anticipated.

PAGE NO.4

BUDGET PR	OCUREME	NT HISTO	RY AND PL	ANNING E	XHIBIT (P-5A)	Weapon System		A. DATE		
								F	ebruary 20	06
B. APPROPRIAT					C. P-1 ITEM NOME				SUBHEAD	
Other Prod	curement	, Navy/B <i>i</i>	<b>A-4</b>		SHIP SELF DE	FENSE SYSTEM (SSDS) / 523	9			
					(CNI Units)					A4UQ
					CONTRACT			DATE OF	SPECS	DATE
Cost Element/	QUANTITY	UNIT	LOCATION	RFP ISSUE	METHOD	CONTRACTOR	AWARD	FIRST	AVAILABLE	REVISIONS
FISCAL YEAR		COST	OF PCO	DATE	& TYPE	AND LOCATION	DATE	DELIVERY	NOW	AVAILABLE
		(000)								
COMMON NETWO	ORK INTERFACI I	E (CNI) I								
UQ009										
FY 2007										
CNI / LHA	1	3,063	NAVSEA	11/06	C/CPAF	TBD	1/07	9/07	Yes	
ONT LIN	'	3,003	IVAVOLA	11/00	0/01 /AI	100	1707	3/01	103	
	L				<u> </u>	l	1	L	<u> </u>	<u> </u>

DD Form 2446-1, JUL 87

New contract will be competitively awarded for production units.

Classification:

ITEM NO. 104

PAGE NO. 5

CLASSIFICATION:	UNCL	<b>ASSIFIED</b>	

P3A	INDIVIDUAL MODIFICATION		February 2006
MODELS OF SYSTEM AFFECTED:	SHIP SELF DEFENSE SYSTEM (SSDS)	TYPE MODIFICATION: Ship Self Defense System MK 2	MODIFICATION TITLE:

#### DESCRIPTION/JUSTIFICATION:

Implements an evolutionary acquisition of improved ship self defense capabilities against Anti-Ship Cruise Missiles for selected non-AEGIS ships by integrating existing programmed Anti-Air Warfare stand alone systems.

It provides an automated quick reaction and multi-target engagement capability emphasizing performance in the littoral environment. Integration focuses on coordinating existing sensor information, providing threat identification and evaluation, assessing defensive readiness, and recommending optimized defensive tactical response to counter single and multiple Anti-Ship Cruise Missile attacks.

#### DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Milestone III decision approved 5 March 1998

	FY 200	4 & Prior	FY	2005	FY	2006	FY	2007	F۱	/ 2008	FY	2009	F١	<u>/ 2010</u>	FY	2011		<u>TC</u>	TOT	AL	
	QTY	\$	QTY		QTY		QTY		QTY		QTY		QTY		QTY		QTY		QTY		
FINANCIAL PLAN (IN MILLIONS)																					
<u>RDT&amp;E</u>	0	411.5	0	47.3	0	39.9	0	3.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	502.2	
<u>PROCUREMENT</u>	22	150.8	1	16.8	0	0.0	0	0.0	0	0.0	1	16.2	1	16.2	1	16.2	8	104.5	34	320.5	
INSTALLATION KITS																			0	0.0	
INSTALLATION KITS NONRECURRING																	0	0.0	0	0.0	
EQUIPMENT	15	94.5	1	16.8	0	0.0	0	0.0	0	0.0	1	16.2	1	16.2	1	16.2	6	93.1	25	252.9	
EQUIPMENT NONRECURRING																	0	0.0	0	0.0	
ENGINEERING CHANGE ORDERS																	0	0.0	0	0.0	
DATA																	0	0.0	0	0.0	
TRAINING EQUIPMENT	3	14.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	11.4	5	25.6	
SUPPORT EQUIPMENT	4	42.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	42.0	
OTHER (Production Support)		35.8		2.0		1.3		1.4		1.4		2.4		2.0	0	2.0	0	14.4	0	62.7	
OTHER (ECP)		3.4		0.0		0.2		0.2		0.2		0.2		0.2	0	0.2	0	0.9	0	5.3	
OTHER (Training)		13.8		1.4		0.6		0.6		0.6		0.6		0.6	0	0.6	0	3.3	0	22.2	
OTHER (COTS Replacement)		21.6		1.6		5.8		34.1		23.2		27.1		12.7	0	37.3	0	115.6	0	279.0	
OTHER (Combat System Display Suite)		0.5		0.0		0.0		0.0		0.0		0.0		0.0		0.0	0	0.0	0	0.5	
OTHER (Congressional Add for NULKA)		5.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	0	0.0	0	5.0	
TOTAL PROCUREMENT		231.0		21.8		7.9		36.2		25.4		46.4		31.6		56.3	0	238.6	0	695.2	
INSTALL COST*	18	47.0	2	16.0	2	9.5	0	5.5	0	5.4	0	8.1	1	9.1	1	10.6	9	59.5	33	170.7	
TOTAL PROGRAM COST	22	278.0	1	37.8	0	17.4	0	41.7		30.8	1	54.5	1	40.7	1	66.9	8	298.2		865.9	

P-1 SHOPPING LIST 104

CLASSIFICATION:

P3A (Continued)  MODELS OF SYSTEMS AFFECTED: SHIP SELF DEFENSE SYSTEM (SSDS)  MODIFICATION TITLE:														February 20	006												
MODELS OF SYS	STEMS AF	FECT	ED: SH	IIP SEL	F DE	FENSE SY	STE	M (SSDS)	-	MODIFICA	ATIC	N T	ritl <u>e:</u>														
NSTALLATION I	NFORMAT	ΓΙΟΝ:																									
METHOD OF IMP	PLEMENT	ATION	Altera	ion In	stall	ation Tear	m (A	dT)																			
DMINISTRATIV	'E LEADTI	ME:	2 mont	hs				PRODUCT	ION I	EADTIME:			12	Mor	nths												
CONTRACT DAT	ΓES:	FY 20	005:			10/04 - 02/	/05		FY	2006: 10/0	)5 - (	02/0	)6 FY 2	007:	10/06 -	02/0	07										
ELIVERY DATE	<b>:</b> :	FY 20			_	2/05 - 12/0			_	2006: 2/06																	
					_				_																		
Cost		Dri	or Years		EV	2005	1	FY 2006		FY 2007	1	ΕV	(\$ in Mi Y 2008		Y 2009		EV	2010		Y 2011	I.	To Co	omplete		Total	1	
0031		Qty	\$	Q		\$	Qty		Qty	\$	Q	_	\$	Qty	\$	-	Qty	\$	Qty	\$		Qty	\$	Qty	\$		
PRIOR YEARS		17	47.0		2	11.6	1	3.8	1	3.	1													21	65.5		
								+														+					
FY 2005 EQUIP	MENT					4.4		5.6	1	0.0	)													1	10.0		
FY 2006 EQUIP	MENT							0.2	K	0.7														0	0.9		
FY 2007 EQUIP	MENT									1.	7	K	4.0											0	5.7		
FY 2008 EQUIP	MENT												1.4	K	4	4.0								0	5.4		
FY 2009 EQUIP	MENT														4	4.1	1	8.5						1	12.6		
FY 2010 EQUIP	MENT																	0.6	1		7.4			1	8.0		
FY 2011 EQUIP	MENT																				3.2	1	5.5	1	8.7		
TO COMPLETE	:																					8	54.0	8	54.0		
10 00W EETE	-		47	.0		16.0		9.5		5.	5		5.4		8	3.1	<u> </u>	9.1			10.6	<u> </u>	59.5	33.0	170.7		
INSTALLA <sup>*</sup>	TION SCH	IEDULI	E:																								
	FY 2004		FY 20	05		FY 2	006		FY	2007			FY 2008		F'	Y 20	009		FY	2010			FY 2011		TC	: ][	TOTAL
	& Prior	1	2 3		4	1 2	3		2	3 4	.	1	2 3	4		2	3	4 1	2	3	4	1	2 3	4			
IN	17	0	2		0	1 0	0		0	1 0	(	)	0 0	0		0	0	0 0	0	0	0	1	1 0	0	8		33
OUT	17	0	0 1	1 .	1	0 0	1	0 0	0	1 0	.	1	0 0	0	0 (	0	0	0 0	0	0	0	0	0 1	1	9		33
Includes FMP, F Qty for K = COT CVN 73 (FY05 p	ΓS Coversi	on Kits	(not ful	syste	ms)	ded in FY0	)6 ar	nd actual insta	all is i	n FY07, per	Сар	stor	ne System:	s Inst	allation le	etter	dtd 2	1 Apr 05			<del></del>		5.0				

CLASSIFICATION: UNCLASSIFIE	_																			
РЗА		INDIVID	UAL	MODIFI	CATIC	ON											Fel	oruary	2006	
MODELS OF SYSTEM AFFECTED: AMPH	IIBIOUS /	ASSAUL	T DIR	ECTION	N SYS	TEM (A	ADS)		TYP	E MODIF	ICATION	ON:				_	MOD	IFICAT	ION TI	TLE:
DESCRIPTION/JUSTIFICATION:																				
Amphibious Assault Direction System (AAI	DS) or AN	I/SKQ-1,	which	integra	ites the	e Positio	on Loc	ation Re	eportir	ng Syster	n (PLR	S) or E	nhanc	ed PLRS	S (EPL	RS) sy	stems	with NA	VSTAF	R Global
Positioning System (GPS) via a Global Positionary Positionary An airborna relations																				
in amphibious operations. An airborne relational AADS provides the capability, in near real-																				
										*		•				•				
DEVELOPMENT STATUS/MAJOR DEVELO	JPMENT	MILEST	ONES	i:																
		4 & Prior				2006		2007		2008		2009		2010		2011		TC		OTAL
FINANCIAL PLAN (IN MILLIONS)	QTY	\$	QTY	\$	QIY	\$	QIY	\$	QTY	\$	QTY	\$	QTY	\$	QIY	\$	QTY	\$	QTY	\$
RDT&E																			0	0.0
PROCUREMENT																			0	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT					5	9.6	4	7.1	2	3.6	2	3.7		0.2		0.2			13	24.0
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS				_															0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0

0 10.6 0 6.7 P-1 SHOPPING LIST 104

4

3.6

3.1

7.1

3.5

4

9.6

2.0

11.6

CLASSIFICATION: UNCLASSIFIED

0

0

0

0

0

13

13

0.0

0.0

0.0

0.0

0.0

0.0

0.0

24.0

12.5

36.6

0

0.0

0

0.0

SUPPORT EQUIPMENT

OTHER (ECP)

OTHER (Training)

OTHER (Production Support)

OTHER (COTS Replacement)

TOTAL PROCUREMENT

TOTAL PROGRAM COST

INSTALL COST\*

OTHER (Combat System Display Suite)

3.7

2.1

5.8

2

2

0

0.2

1.7

1.9

0.2

0.2

P3A (Continued) INDIVIDUAL MODIFICATION (Continued)											ued)														Februa	y 200	6			
MODELS OF SYS	STEMS AF	FECT	ED: A	MPHIBIC	OUS ASS	AULT I	DIRECT	TION S	SYSTE	M (AAD	S)	•		MOD	IFICA	ATION	I TITLI	E <u>:</u>												
INSTALLATION I	NFORMAT	TION:																												
METHOD OF IMP	PLEMENTA	ATION	: Altera	tion In	stallatio	n Tea	m (AIT	)																						
ADMINISTRATIV	E LEADTI	ME:	2 mon	<u>t</u> hs			PRO	ODUC	TION	LEAD	TIME:			10	Mon	ths														
CONTRACT DAT	ES:								FY 2	2005:				FY 20	006:				FY 2	2007:										
DELIVERY DATE	TE: FY 2005:													FY 20	006:				FY 2	2007:										
	T	<b>D</b> :				- 1	E) / 00	00	1	E) ( 000	_			n Millio		24.000		_	24.004	0 1		(0011	1-				<del>-</del> -			
Cost:	Prior Years   FY 2005   FY 2006   FY 2007											Qty	FY 200		Qty	Y 200		P Qty	Y 201		Qty	Y 2011 \$		Qty	omplete \$	Qt	Tot	al \$		
		Qty	Ψ	Qty	Ψ	QI	y	Ψ	Qty	Ψ		Qty	4	,	Qty	4	,	Qty	4	,	Qty	Ψ		Qty	Ψ	Qt	y	Ψ		
PRIOR YEARS	EARS																											0.0		
FY 2005 EQUIPMENT																											0	0.0		
FY 2006 EQUIP	MENT						1	2.0																			1	2.0		
FY 2007 EQUIP	MENT								4		3.5																4	3.5		
FY 2008 EQUIP	MENT											4		3.1													4	3.1		
FY 2009 EQUIP	MENT														2		2.1										2	2.1		
FY 2010 EQUIP	MENT																	2		1.7							2	1.7		
FY 2011 EQUIP	MENT																					(	0.0				0	0.0		
TO COMPLETE																									0.0	1	3	12.5		
					(	0.0		2.0			3.5			3.1			2.1			1.7		(	0.0							
INSTALLA <sup>*</sup>	TION SCH	EDUL	E:																											
	FY 2004		FY 200	<u>)5</u>	F	Y 200	6		FY	2007			FY 2	2008			FY 2	009			FY 2	010			FY 201	1		TC	;	TOTAL
	& Prior	1	2 3	4	1	2 3	3 4	1	2	3	4	1	2	3	4	1_	2	3	4	1	_ 2	3	4	1	2 3	<u> </u>				
IN	0	0	0 0	0	0	0 0	) 1	1	1	1	1	1	1	1	1	0	1	1	0	1	1	0	0	0	0 0	0	,	0		13
OUT	0	0	0 0	0	0	0 0	) 1	1	1	1	1	1	1	1	1	0	1	1	0	1	1	0	0	0	0 0	) (		0		13
									104			D/	AGE	0								C	1 1 5 6	SIEIC	P-: CATION:		1 466	SIEIED		
									104			Ρ/	NGE	9								C	LAS	SIFIC	ATION:	ONC	LASS	סורובט		

CLAS	SSIFICATION: UNCLASSIFIED	
P3A	INDIVIDUAL MODIFICATION	February 2006

I			
MODELS OF SYSTEM AFFECTED:	COMMON NETWORK INTERFACE (CNI)	TYPE MODIFICATION:	MODIFICATION TITLE:

#### DESCRIPTION/JUSTIFICATION:

CNI upgrades the existing system using COTS hardware and common interoperable software compliant with the Navy's Open Architecture standards to integrate the data from ship's sensors, external links, and FORCEnet sources into an operational picture for the war fighter and an out put to the legacy ACDS weapons control system.

It is a Commercial Off The Shelf (COTS) Open interface system transitioning to an upgrade that modernizes Combat Systems on legacy amphibious ships, initially LHA-1 and LHD-1 class, which will support the Expeditionary Strike Group (ESG).

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 200 QTY	4 & Prior \$	<u>FY</u> QTY	200 <u>5</u> \$	<u>FY</u> QTY	2006 \$	<u>FY</u> QTY	2007 \$	<u>FY</u> QTY	<u>′ 2008</u> \$	<u>FY</u> QTY	2009 \$	<u>FY</u> QTY	<u>′ 2010</u> \$	<u>FY</u> QTY	<u>′ 2011</u> \$	QTY	<u>TC</u> \$	QTY	TOTAL \$
FINANCIAL PLAN (IN MILLIONS)			<u> </u>	Ψ	<u> </u>		Ī	Ψ		<u> </u>	<u> </u>		<u> </u>	<u> </u>	Ī			<u> </u>	<u> </u>	
RDT&E																			0	0.0
<u>PROCUREMENT</u>																			0	0.0
INSTALLATION KITS																			0	0.0
INSTALLATION KITS NONRECURRING																			0	0.0
EQUIPMENT	0	0.0	0	0.0	0	0.0	1	3.1	2	6.2	2	6.4	2	6.5	2	7.0	0	0.0	0	29.2
EQUIPMENT NONRECURRING																			0	0.0
ENGINEERING CHANGE ORDERS																			0	0.0
DATA																			0	0.0
TRAINING EQUIPMENT																			0	0.0
SUPPORT EQUIPMENT																			0	0.0
OTHER (Production Support)																			0	0.0
OTHER (ECP)																			0	0.0
OTHER (Training)																			0	0.0
OTHER (COTS Replacement)						_													0	0.0
OTHER (Combat System Display Suite)																			0	0.0
TOTAL PROCUREMENT		0.0		0.0		0.0	1	3.1	2	6.2	2	6.4	2	6.5	2	7.0	0	0.0	0	29.2
INSTALL COST*		0.0	0	0.0	0	0.0	0	1.3	0	3.7	0	4.7	0	5.3	0	6.0	0	0.0	0	21.0
TOTAL PROGRAM COST	0	0.0	0	0.0	0	0.0	0	4.4	0	9.9	0	11.1	0	11.8	0	13.0	0	0.0	0	50.1

P-1 SHOPPING LIST 104

UNCLASSIFIED

CLASSIFICATION:

P3A (Continued)	A (Continued)  INDIVIDUAL MODIFICATION (Continued)  DELS OF SYSTEMS AFFECTED: COMMON NETWORK INTERFACE (CNI) MODIFICATION TITLE:																					Feb	ruary	2006						
MODELS OF SYS	STEMS AF	FECT	ED: <u>CC</u>	OMMON	NETWO	RK INT	ERFA	CE (CI	NI)	MODIF	FICAT	ION	T <u>ITLE:</u>																	
INSTALLATION II	NFORMAT	ΓΙΟΝ:																												
METHOD OF IMP	PLEMENTA	ATION	Altera	tion Ins	stallation	<u>1 T</u> ean	n (AIT	)																						
ADMINISTRATIVI	E LEADTI	ME:	2 mont	t <u>h</u> s			PRO	ODUC	TION	LEADT	IME:			6-12	2 Mo	nths														
CONTRACT DAT	ES:								FY 2	2005:		N/A		FY 200	06: _	N.	<u>Ά</u>		FY 20	07:	Nov.	06								
DELIVERY DATE	:								FY 2	2005:		N/A		FY 200	06:	<u>N</u>	<u>'A</u>		FY 20	07:	Jul.	07								
														Millio																
Cost:			Years		Y 2005		FY 20			Y 2007			Y 2008			Y 2009			Y 2010			′ 2011 \$			omple		01	Total \$		
		Qty	\$	Qty	\$	Qty	, ;	\$	Qty	\$		Qty	\$	-	Qty	\$	C	Qty	\$		Qty	ф		Qty		\$	Qty	Ф		
PRIOR YEARS																											0	0.0		
TRIOR TEARO																											U	0.0		
FY 2005 EQUIPI	MENT																										0	0.0		
FY 2006 EQUIPI	MENT																										0	0.0		
FY 2007 EQUIPI	MENT								1		1.3																1	1.3		
FY 2008 EQUIPI	MENT											2		3.7													2	3.7		
FY 2009 EQUIPI	MENT														2	4	1.7										2	4.7		
FY 2010 EQUIP	MENT																	2		5.3							2	5.3		
FY 2011 EQUIPI	MENT																				2		6.0				2	6.0		
TO COMPLETE																											9	21.0		
INSTALLA <sup>-</sup>	TION SCH	EDIII	E.		0	0.0		0.0			1.3			3.7		4	1.7			5.3			6.0							
i i	FY 2004		FY 200	15		Y 2006			EV	2007	1		FY 2	008			Y 200	<u></u>			FY 20	010			EV	2011		Т		TOTAL
	& Prior	1	2 3			2 3	-	1		3	4	1		3	4	_	<u>1 200</u> 2		4	1		3	4	1	2	3	4			TOTAL
IN	0	0	0 0	0	0 0	0	0	0	1	0	0	0	1	0	1	1	1	0	0	0	0	2	0	1	0	1	0	(	)	9
OUT	0	0	0 0	0	0 0	0 0	0	0	1	0	0	0	0	1	0	1	)	0	1	1	0	0	1	1	0	1	1	(	)	9
																										P-3A				
									104			PA	AGE	11								(	CLAS	SSIFI	CATI	ON:	JNCL	ASSIFIED		

	В	UDGET IT	EM JUSTIFIC	CATION SHE	ET			DATE:				
			P-40						F	ebruary 200	6	
APPROPRIATION/BUI OTHER PROCUREN						P-1 ITEM NOM	ENCLATURE					
BA-4 Ordnance Sup	port Equipment						1	4L7 AEGIS S	UPPORT EQU	IPMENT BL	524600/52460	05
Program Element for Co	ode B Items:					Other Related I	Program Elemei <b>0604307N</b>					
	FY 2004 and Prior Yrs	ID Code	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Complete	Total
QUANTITY												
COST (In Millions)	\$511.7	Α		\$61.5	\$101.6	\$75.3	\$114.7	\$138.5	\$172.6	\$161.6	TBD	\$1,337.5
SPARES COST (In Millions)				\$4.0	\$3.2	\$2.3	\$2.2	\$2.6	\$2.5	\$2.4		\$19.1

#### PROGRAM DESCRIPTION/JUSTIFICATION:

CG Baseline 2

1. This program provides equipment for shore facilities and for shipboard upgrades to support the battle readiness of AEGIS Cruisers and Destroyers in the following areas: a. Special Tooling and Test Equipment for AEGIS unique depots; b. Computer, displays and simulators for the Integrated Warfare Systems Laboratory (IWSL) at Dahlgren, VA; c. Weapon/Combat System equipments for the Surface Combat Systems Center (SCSC) at Wallops Island, VA; d. Weapon System Training equipment for the AEGIS Training & Readiness Center (ATRC) at Dahlgren, VA; e. AEGIS Weapon System ORDALT procurement; f. AEGIS Weapon System SHIPALT procurement; g. Class Common Equipment to support shorter Regular Overhauls and Selected Restricted Availabilities. Includes Weapon and Ship System Components that require long repair turn-around; h. DDG - COTS Refresh for AWS equipments; i. Shipboard equipment and ORDALT installation; and j. Combat Support ShipAlts to reconstitute CIWS onboard Flight 2A DDGs.

2. The FY 2005-11 funds will be used to upgrade three centers (Integrated Warfare Systems Laboratory, AEGIS Training & Readiness Center, and Surface Combat Systems Center) to properly accommodate CG 47 and DDG 51 Combat System Baselines and to provide shipboard SHIPALT and ORDALT equipments for existing Cruiser and Destroyer Baselines. Funding is also for the installation of equipment including the Fleet Modernization Program, training equipment, and other shore facilities. These include, among others, the following major Weapon/Combat systems:

 Description
 Applicable Hulls

 CG Baseline 1 Plus
 F/F CG 52 - CG 58

Tomahawk Weapon System

Anti-Submarine Warfare Upgrade SQQ-89 MK 41 Vertical Launch System in place of MK 26

CG Baseline 3A CG Baseline 2 plus B/F CG 59 - CG 64

SPY-1B RADAR in place of SPY-1A UYQ-21 Displays in place of UYA-4 Backfit UYK-43 (LoBoy)/44 Computers

P-1 SHOPPING LIST

DD Form 2454, JUN 86 ITEM NO. 105 PAGE NO. 1 CLASSIFICATION: UNCLASSIFIED

	BUDGET I	TEM JUSTIFICATION	SHEET	DATE	:
		P-40 CONTINUATION	ON		February 2006
APPROPRIATION/BI OTHER PROCURE				P-1 ITEM NOMENCLATURE	
BA-4 Ordnance S	Support Equipment			14L7 AEGIS S	SUPPORT EQUIPMENT BLI 524600/524605
Program Element for	Code B Items:			Other Related Program Elements	
	Description:	Applicable Hulls:		Description:	Applicable Hulls:
CG Baseline 4	CG Baseline 3 plus Vertical Launch ASROC SM-2 Missile Upgrade UYK-43/44 Computers in place of UYK	F/F CG 65 - CG 73	DDG Baseline 4	CG Baseline 3 plus SPY-1D RADAR in place of SPY-1b MK 160 Gun Computing System in place of UYK-43/44 Computers in place of UYK-7/2	
CG Baseline 6.1	CG Baseline 4 plus CEC, ADS MK 6 MOD 2, UYQ-70 Partial, NGP/Optical Disk, Armed Helo, SGS, SARTIS	B/F CGS 59, 65, 66, 68, 69 & 71	DDG Baseline 5	DDG Baseline 4 plus Joint Tactical Information Distribution System (JTIDS/Command & Control (C2P Combat Direction Finding (CDF)	F/F DDG 68 - DDG 78
CG Baseline 7.1.C	CG Baseline 2, 3, 4, & 6 plus Advanced Combat Systems Architectu Service Life Extension	B/F CG 52 - 73 re		Tactical Data Information Exchange Syste AN/SLQ-32(V) 3 Active Electronic Counter Aegis Extended Range (ER) Missile	,
			DDG Baseline 6 Phase 1	DDG Baseline 5 plus ORTS Upgrade, ECM Upgrade, ACTS Re SQQ-89 (V) 10, ATWCS Phase 2 AN/UYQ-70, Doppler SONAR Velocity	F/F DDG 79 - DDG 84 shost
			DDG Baseline 6 Phase 3	DDG Baseline 6 Phase 1 plus Upgrades to AN/UYQ-70 Display Suite Upgrades to ORTS, CEC, NAVSSI BIk III, CDLMS, JTT, ESSM, STAMO Mods, SPY SGS InLine, VDDS, 600+ CPCRs, and for F/F only SQQ-89(V)14 & ALIS	
			DDG Baseline 7 Phase 1	Full COTS Advanced Computing SPY-1D(v) Littoral Radar SQQ-89(v)15 AN/UYQ-70	F/F DDG 91 - DDG 102
		D 4 CU	OPPING LIST		

P-1 SHOPPING LIST

DD Form 2454, JUN 86 ITEM NO. 105 PAGE NO. 2 CLASSIFICATION: UNCLASSIFIED

	WEAPONS SYSTEM COS	ST ANAL	YSIS		AEGIS V	eapon Syste		TE14				DATE:	ab	00
APPROP	P-5 PRIATION/BUDGET ACTIVITY				ID Code		EAPON SYS					SUBHEAD:	ebruary 20	06
	rocurement, Navy				.5 0000							000.127.0.		
BA-4: C	PRDNANCE SUPPORT EQUIPMENT		ı		Α	AEGIS S	SUPPORT E	QUIPMENT	BLI 524	4600/52460	5		14L7	
			TOTAL COST	F IN THOUSANDS C	F DOLLARS									
COST	ELEMENT OF COST	ID Code	FY 2004 & PRIOR				FY 2005			FY 2006			FY 2007	
CODE		Code	Total Cost			Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
L7CA2	STORAGE CAPABILITY PLUS-UP		0					1,100			0			0
L7CA3	IBS PLUS-UP		0					6,800			0			0
L7CA4	SITE EQUIPMENT PLUS-UP		0					1,500			4,030			0
L7001	DEPOT SPECIAL TOOLING/TEST EQPT		10,276					870			800			800
L7003	AEGIS COMPUTER CENTER EQPT		16,142					1,175			1,400			1,500
L7005	SMARTSHIP SYSTEMS		110,200					0	3		29,433			1,700
L7006	SURFACE COMBAT SYSTEMS CENTER EQPT		12,671					2,288			1,916			1,924
L7007	AEGIS TRAINING & READINESS CENTER		9,705					1,816			1,500			1,500
L7010	AEGIS WEAPON SYSTEM ORDALTS		56,705					6,664			7,770			4,100
L7011	AEGIS WEAPON SYSTEM SHIPALTS		165,111					15,981			23,791			26,585
L7013	CLASS COMMON EQUIPMENT		6,596					1,000			1,000			1,000
L7016	FIELD ACT'Y INTEGRATED COMM EQPT		2,221					0			0			(
L7022	AADC		19,463					0			0			(
L7023	IBS SYSTEMS		6,000					0			0			(
L7025	DDG - COTS REFRESH		0					0			0			5,000
L7070	COMBAT SUPPORT SHIPALTS		10,251					7,099			10,767			10,000
L7600	INSTALLATION OF EQPT, FMP		86,423					15,216			19,196			21,240
			511,764											

DD FORM 2446, JUN 86 P-1 SHOPPING LIST ITEM NO. 105 PAGE NO. 3

CLASSIFICATION: UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AN	D PLANNI	NG EXHIBIT	(P-5A)			AEGIS Weapon System			DATE:	
									FEBRUARY	2006
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM	NOMENCLATURE			SUBHEAD	
Other Procurement, Navy										
BA-4: ORDNANCE SUPPORT EQUI	PMENT				AEGIS SUP	PORT EQUIPMENT BLI 52460	0/524605		14L7	
					CONTRACT			DATE OF	SPECS	DATE
Cost Element/	QTY	UNIT	LOCATION	RFP ISSUE	METHOD	CONTRACTOR	AWARD	FIRST	AVAILABLE	REVISIONS
FISCAL YEAR		COST	OF PCO	DATE	& TYPE	AND LOCATION	DATE	DELIVERY	NOW	AVAILABLE
FISCAL YEAR 2005										
L7003										
INTEGRATED WARFARE SYS LAB										
COMMERCIAL SYS MOD	1 LOT	975	NSWC DD	N/A	FP	VARIOUS	1/05	7/05	YES	
CABLES	1 LOT	200	NSWC DD	N/A	FP	VARIOUS	1/05	7/05	YES	
<u>L7006</u>										
scsc										
COTS UPGRADES	1 LOT	872	NSWC DD	N/A	WX	VARIOUS	1/05	7/05	YES	
EQUIPMENT ACTIVATION	1 LOT	758	NAVSEA	N/A	BOA	LOCKHEED MARTIN - NJ	1/05	7/05	YES	
COTS MODERNIZATION & SWITCHING	1 LOT	625	NSWC DD	01/05	BOA	LOCKHEED MARTIN - MN	2/05	7/05	YES	
EXCOMM	1 LOT	33	NAWCAD/PAX	01/05	wx	VARIOUS	2/05	7/05	YES	
<u>L7007</u>										
ATRC										
COTS MODERNIZATION AND SWITCHING	1 LOT	1816	NSWC DD	10/04	ВОА	VARIOUS	1/05	7/05	YES	
L7010										
AWS ORDALTS										
CND/SONAR TEMP CONTROL VALVE	1 LOT	1772	NSWC PHD	11/04	wx	VARIOUS	1/05	1/06	YES	
MK 84 FC-72 FLUID REMOVAL O/A	1 LOT	1100	NSWC PHD	11/04	WX	VARIOUS	1/05	1/06	YES	
B600 PRINTER REPLACEMENT O/A	30	10	LOCKHEED	11/04	BOA	LOCKHEED MARTIN - NJ	1/05	1/06	YES	
Q-70 ORDALTS	1 LOT	3492	NAVSEA	11/04	ВОА	LOCKHEED MARTIN - MN	1/05	1/06	YES	
D. REMARKS			DINOLIOT							

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST

ITEM NO. 105 PAGE 4

CLASSIFICATION: UNCLASSIFIED

BUDGET PROCUREMENT HISTORY	AND PLANNI	NG EXHIBIT (	P-5A)			AEGIS Weapon System			DATE:	
									FEBRUARY	2006
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM	NOMENCLATURE			SUBHEAD	
Other Procurement, Navy										
BA-4: ORDNANCE SUPPORT EC	QUIPMENT				AEGIS SUP	PORT EQUIPMENT BLI 52460	0/524605		14L7	
					CONTRACT			DATE OF	SPECS	DATE
Cost Element/	QTY	UNIT	LOCATION	RFP ISSUE	METHOD	CONTRACTOR	AWARD	FIRST	AVAILABLE	REVISIONS
FISCAL YEAR 2005 (CONT)		COST	OF PCO	DATE	& TYPE	AND LOCATION	DATE	DELIVERY	NOW	AVAILABLE
FISCAL YEAR 2005 (CONT)										
<u>L7011</u>										
AWS SHIPALTS										
DDG SUPPORTABILITY MODS	1 LOT	13981	NAVSEA	12/04	BOA	LOCKHEED MARTIN - MN	02/05	2/06	YES	
UYK-43 CARDS	200	10	NAVSEA	01/05	wx	NAVSEA - CRANE, IN	02/05	2/06	YES	
<u>L7013</u>										
CLASS COMMON EQUIPMENT										
CCE FOR DDG-51 CLASS	1 LOT	500	SUPSHIP / BATH	10/04	FP	BIW - MAINE	1/05	6/05	YES	
CCE FOR CG-47 CLASS	1 LOT	500	SUPSHIP / PASC	10/04	FP	NGIT - MISS	1/05	6/05	YES	
<u>L7070</u>										
COMBAT SUPPORT SHIPALTS										
COMBAT SUPPORT SHIPALTS	1 LOT	7099	VARIOUS	10/04	FP	VARIOUS	1/05	1/06	YES	
D. REMARKS			1		<u> </u>	<u> </u>		<u> </u>	1	

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST

ITEM NO. 105 PAGE NO. 5 CLASSIFICATION: UNCLASSIFIED

BUDGET PROCUREMENT HISTORY ANI	D PLANNI	NG EXHIBIT (I	P-5A)			AEGIS Weapon System			DATE:	
									FEBRUARY	2006
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM	NOMENCLATURE			SUBHEAD	
Other Procurement, Navy										
BA-4: ORDNANCE SUPPORT EQUI	PMENT		1	1		PORT EQUIPMENT BLI 52460	00/524605		14L7	
					CONTRACT			DATE OF	SPECS	DATE
Cost Element/	QTY	UNIT	LOCATION	RFP ISSUE	METHOD	CONTRACTOR	AWARD	FIRST	AVAILABLE	REVISIONS
FISCAL YEAR		COST	OF PCO	DATE	& TYPE	AND LOCATION	DATE	DELIVERY	NOW	AVAILABLE
FISCAL YEAR 2006										
<u>L7003</u>										
INTEGRATED WARFARE SYS LAB										
COMMERCIAL SYS MOD	1 LOT	1200	NSWC DD	N/A	FP	VARIOUS	3/06	08/06	YES	
CABLES	1 LOT	200	NSWC DD	N/A	FP	VARIOUS	3/06	08/06	YES	
<u>L7005</u>										
SMARTSHIP (INTEGRATED SHIP CONTI	ROLS)									
SMARTSHIP UPGRADE	3	7100	NAVSEA	07/05	FFP	TBD	2/06	12/06	YES	
ENGINEERING	1 LOT	4944	NAVSEA	N/A	WX	VARIOUS	N/A	N/A	N/A	
LOGISTICS	1 LOT	932	NAVSEA	N/A	WX	VARIOUS	N/A	N/A	N/A	
TRAINING	1 LOT	1587	NAVSEA	N/A	WX	VARIOUS	N/A	N/A	N/A	
TECH REFRESH	1 LOT	670	NAVSEA	N/A	WX	VARIOUS	N/A	N/A	N/A	
L7006										
scsc										
EQUIPMENT ACTIVATION	1 LOT	800	NAVSEA	N/A	BOA	LOCKHEED MARTIN - NJ	3/06	08/06	YES	
COTS MODERNIZATION & SWITCHING	1 LOT	1083	NSWC DD	11/05	WX	VARIOUS	3/06	08/06	YES	
EXCOMM MODERNIZATION	1 LOT	33	NAWCAD/PAX	11/05	wx	VARIOUS	3/06	08/06	YES	
L7007										
ATRC										
COTS MODERNIZATION	1 LOT	1500	NSWC DD	11/05	BOA	VARIOUS	3/06	08/06	YES	
AND SWITCHING				,	]		5,55	33,33	.20	
7.1.2 3.7110111110										
D. REMARKS					<u> </u>					
			SHODDING LIST							

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST

ITEM NO. 105 PAGE NO. 6

CLASSIFICATION: UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AN	ID PLANNI	NG EXHIBIT (	P-5A)			AEGIS Weapon System			DATE:	
									FEBRUARY	2006
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM	NOMENCLATURE			SUBHEAD	
Other Procurement, Navy										
BA-4: ORDNANCE SUPPORT EQU	IPMENT					PORT EQUIPMENT BLI 52460	00/524605		14L7	
					CONTRACT			DATE OF	SPECS	DATE
Cost Element/	QTY	UNIT	LOCATION	RFP ISSUE	METHOD	CONTRACTOR	AWARD	FIRST	AVAILABLE	REVISIONS
FISCAL YEAR FISCAL YEAR 2006 (cont)		COST	OF PCO	DATE	& TYPE	AND LOCATION	DATE	DELIVERY	NOW	AVAILABLE
L7010										
AWS ORDALTS										
CND/SONAR TEMP CONTROL VALVE	1 LOT	1,772	NSWC PHD	10/05	WX	VARIOUS	3/06	1/07	YES	
MK 84 FC-72 FLUID REMOVAL O/A	1 LOT	1,550	NSWC PHD	10/05	WX	VARIOUS	3/06	1/07	YES	
AWS SUPPORTABILITY ORDALTS	1 LOT	4,448	NAVSEA	10/05	BOA	VARIOUS	3/06	1/07	YES	
<u>L7011</u>										
AWS SHIPALTS										
DDG SUPPORTABILITY MODS	1 LOT	12,803	NAVSEA	12/05	BOA	VARIOUS	3/06	2/07	YES	
UYK-43 CARDS	200	10	NAVSEA	12/05	BOA	LOCKHEED MARTIN - MN	3/06	2/07	YES	
DDG BACKFIT EQUIPMENT	1	8,988	NAVSEA	12/05	BOA	VARIOUS	3/06	2/07	YES	
L7013										
CLASS COMMON EQUIPMENT										
CCE FOR DDG-51 CLASS	1 LOT	500	SUPSHIP / BATH	10/05	FP	BIW - MAINE	3/06	10/06	YES	
CCE FOR CG-47 CLASS	1 LOT	500	SUPSHIP / PASC	10/05	FP	NGIT - MISS	3/06	10/06	YES	
<u>L7070</u>										
COMBAT SUPPORT SHIPALTS										
COMBAT SUPPORT SHIPALTS	1 LOT	10,767	VARIOUS	10/05	FP	VARIOUS	3/06	1/07	YES	
D. REMARKS										

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST

ITEM NO. 105 PAGE NO. 7

CLASSIFICATION: UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND	PLANNING I	EXHIBIT (P-5A)	)			<b>AEGIS Weapon System</b>			DATE:	
									FEBRUARY	2006
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM	NOMENCLATURE			SUBHEAD	
Other Procurement, Navy										
BA-4: ORDNANCE SUPPORT EQUIP	MENT		1		AEGIS SUP	PORT EQUIPMENT BLI 52460	00/524605		14L7	1
					CONTRACT			DATE OF	SPECS	DATE
Cost Element/	QTY	UNIT	LOCATION	RFP ISSUE	METHOD	CONTRACTOR	AWARD	FIRST	AVAILABLE	REVISIONS
FISCAL YEAR	+	COST	OF PCO	DATE	& TYPE	AND LOCATION	DATE	DELIVERY	NOW	AVAILABLE
FISCAL YEAR 2007										
<u>L7003</u>										
INTEGRATED WARFARE SYS LAB										
COMMERCIAL SYS MOD	1 LOT	1,300	NSWC DD	N/A	FP	VARIOUS	1/07	1/08	YES	
CABLES	1 LOT	200	NSWC DD	N/A	FP	VARIOUS	2/07	11/07	YES	
<u>L7005</u>										
SMARTSHIP (INTEGRATED SHIP CONTRO	DLS)									
ENGINEERING	1 LOT	700	NAVSEA	N/A	WX	VARIOUS	N/A	N/A	N/A	
LOGISTICS	1 LOT	700	NAVSEA	N/A	WX	VARIOUS	N/A	N/A	N/A	
TRAINING	1 LOT	300	NAVSEA	N/A	WX	VARIOUS	N/A	N/A	N/A	
<u>L7006</u>										
scsc										
EQUIPMENT ACTIVATION	1 LOT	758	NAVSEA	N/A	BOA	LOCKHEED MARTIN - NJ	2/07	11/07	YES	
COTS MODERNIZATION & SWITCHING	1 LOT	1,133	NSWC DD	10/06	WX	VARIOUS	2/07	11/07	YES	
EXCOMM MODERNIZATION	1 LOT	33	NAWCAD/PAX	10/06	wx	VARIOUS	2/07	11/07	YES	
<u>L7007</u>										
ATRC										
COTS MODERNIZATION	1 LOT	1,500	NSWC DD	10/06	BOA	VARIOUS	2/07	11/07	YES	
AND SWITCHING										
D. REMARKS			•		•	•		•	•	•

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST

ITEM NO. 105 PAGE NO. 8 CLASSIFICATION: UNCLASSIFIED

BUDGET PROCUREMENT HISTORY A	ND PLANNII	NG EXHIBIT (P	-5A)			AEGIS Weapon System	ı		DATE: FEBRUAR	Y 2006
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy					C. P-1 ITEM N	IOMENCLATURE			SUBHEAD	
BA-4: ORDNANCE SUPPORT EQ	UIPMENT				AEGIS SUF	PORT EQUIPMENT BLI	524600/5246	05	14L7	7
					CONTRACT			DATE OF	SPECS	DATE
Cost Element/	QTY	UNIT	LOCATION	RFP ISSUE	METHOD	CONTRACTOR	AWARD	FIRST	AVAILABLE	REVISIONS
FISCAL YEAR		COST	OF PCO	DATE	& TYPE	AND LOCATION	DATE	DELIVERY	NOW	AVAILABLE
FISCAL YEAR 2007 (cont)										
<u>L7010</u>										
AWS ORDALTS										
MK 84 FC-72 FLUID REMOVAL O/A	1 LOT	1,500	NSWC PHD	11/06	WX	VARIOUS	3/07	1/08	YES	
AWS SUPPORTABILITY ORDALTS	1 LOT	2,600	NAVSEA	11/06	BOA	VARIOUS	1/07	1/08	YES	
<u>L7011</u>										
AWS SHIPALTS										
DDG SUPPORTABILITY MODS	1 LOT	9,486	NAVSEA	11/06	BOA	VARIOUS	2/07	2/08	YES	
UYK-43 CARDS	250	10	NAVSEA	11/06	wx	NAVSEA CRANE, IN	2/07	2/08	YES	
DDG BACKFIT EQUIPMENT	1	9,558	NAVSEA	11/06	BOA	VARIOUS	2/07	2/08	YES	
CG BACKFIT EQUIPMENT	1	5,041	NAVSEA	11/06	воа	VARIOUS	2/07	2/08	YES	
<u>L7013</u>										
CLASS COMMON EQUIPMENT										
CCE FOR DDG-51 CLASS	1 LOT	500	SUPSHIP / BATH	11/06	FP	BIW - MAINE	2/07	11/07	YES	
CCE FOR CG-47 CLASS	1 LOT	500	SUPSHIP / PASC	11/06	FP	NGIT - MISS	2/07	11/07	YES	
COL FOR CO-47 CLASS	1 201	300	30F3FIIF / FA3C	11/00		NG11 - 101133	2/01	11/07	123	
<u>L7025</u>										
DDG - COTS REFRESH										
COTS DMS COMPONENTS	1 LOT	5,000	NAVSEA	11/06	FP	VARIOUS	2/07	11/07	YES	
<u>L7070</u>										
COMBAT SUPPORT SHIPALTS										
COMBAT SUPPORT SHIPALTS	1 LOT	10,000	VARIOUS	11/06	FP	VARIOUS	1/07	1/08	YES	
D. REMARKS										

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST

ITEM NO. 105 PAGE NO. 9

CLASSIFICATION: UNCLASSIFIED

РЗА		INDIVID	JAL N	MODIFIC	ATIO	ı																
MODELS OF SYSTEM AFFECTED:	AWS		TYP	E MODIF	FICATI	ON:	SMAI	RTSHIP		-			MOI	DIFICAT	ION	TITLE	:	L700	5			
DESCRIPTION/JUSTIFICATION: Funds will be used to backfit labor	or savinç	g Smartsh	iip ena	abling te	chnolo	gies on C	CG 47 (	Class shi	ps.													
DEVELOPMENT STATUS/MAJOR DEVELO	PMEN	T MILEST	ONE	S:																		
	PRIC QTY	OR YR \$	<u>FY</u> QTY	<u>Y 2004</u> \$	<u>F`</u> QTY	<u>/ 2005</u> \$	<u>FY</u> QTY	<u>′ 2006</u> \$	<u>FY</u> QTY	<u>2007</u>		2008 ′\$		<u>2009</u> ′ \$			FY 2		QTY	<u>TC</u> \$	QTY	ΓΟΤΑL \$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																						
<u>PROCUREMENT</u>																						
INSTALLATION KITS																						
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						
EQUIPMENT	8	49.6					3	21.3			3	22.0			2	11.6				TBD	16	104.5
EQUIPMENT NONRECURRING		10.0																				10.0
TEST EQUIPMENT		2.3																				2.3
TRAINING EQUIPMENT		6.6																				6.6
SHOCK TRIALS & RETROFIT		3.2																				3.2
SUPPORT EQUIPMENT		1.1																				1.1
ENGINEERING		26.3						4.9		0.7		7.5		2.4		1.3				TBD		43.1
LOGISTICS		4.9						0.9		0.7		2.2		0.7		0.5				TBD		9.9
TRAINING		2.5						1.6		0.3		1.2		0.2		0.1				TBD		5.9
TECH REFRESH		0.0						0.7				7.3										8.0
ENGINEERING CHANGE PROPOSALS		3.7																				3.7
INSTALL COST	7	19.0					1	8.1	2	11.6	1	5.4	3	20.1			2	13.7		TBD	16	77.9
TOTAL PROGRAM COST		129.2				0.00		37.5		13.3		45.6		23.4		13.5		13.7		TBD		276.2
			P-1	SHOPP	ING L	IST									CLA	SSIFI	CATIC	on: l	UNC	CLASS	SIFIED	

P3A (Continued)			INDIVIDU	AL MODIFI	CATIO	N (Cont	tinued)																				
MODELS OF SYSTEMS	AFFECTE	D:	AWS			М	ODIFICAT	ION TITLE	:	SMA	RTSHIF	•	_				L70	05									
INSTALLATION INFORM	ATION:																										
METHOD OF IMPLEMEN	TATION:			_																							
ADMINISTRATIVE LEAD	TIME:2	2 Months	_		PROD	UCTIO	N LEADT	IME:	10-12 mon	ths																	
CONTRACT DATES:	FY 2	004:	_	_	FY 20	05:		N/A			F	Y 2006:	F	ebrua	ry 06			FY 20	07:	Novembe	r 06						
DELIVERY DATE:	FY 2	004:		_	FY 20	05:		N/A	<u> </u>		F	Y 2006:	D	eceml	ber 06			FY 20	07:	Novembe	r 07						
								(	\$ in Millions)																		
Cost:		Years				FY 20			2006		FY 20			FY 20			Y 2009			2010		FY 2011			mplete		otal
	Qty	\$	Qty	\$	Qty	у	\$	Qty	\$	Q	ty	\$	Qty	У	\$	Qty	:	\$	Qty	\$	Qt	у	\$	Qty	\$	Qty	\$
PRIOR YEARS	7	19.0						1	8.1																	8	27.1
FY 2005 EQUIPMENT																										_	
														+												0	0
FY 2006 EQUIPMENT										1 -	2	11.6	1	-	5.4						-	-				3	17
FY 2007 EQUIPMENT										-											-					0	0
FY 2008 EQUIPMENT																3	20	).1								3	20.1
FY 2009 EQUIPMENT																										0	0
FY 2010 EQUIPMENT																					2	1	13.7			2	13.7
FY 2011 EQUIPMENT																											
TO COMPLETE																									TBD	TBD	TBD
INSTALLATION SCHEDU	JLE:																										
	Prio	r Year				FY 20	005	F	′ 200 <u>6</u>		FY 20	007		FY 20	800	F	Y 2009		FY	2010		FY 2011	1			Total Qty	Total Cost
					1	2	3 4	1 2	3 4	1	2	3 4	1	2	3 4	1	2 3	4	1 2	3 4	1	2 3	4				
IN	7				0	0	0 0	0 0	1 0	0	2	0 0	0	0	1 1	0	1 1	0	0 0	0 0	0	1 1	0			16	TBD
OUT	7				0	0	0 0	0 0	0 0	1	0	2 0	0	0	0 0	2	0 0	2	0 0	0 0	0	0 1	1				
																			P-3A								

CLASSIFICATION: UNCLASSIFIED

P-1 SHOPPING LIST ITEM NO. 105 PAGE 11

P3A

MODELS OF SYSTEM AFFECTED: TYPE MODIFICATION: <u>AWS ORDALTS</u> MODIFICATION TITLE: <u>L7010</u>

DESCRIPTION/JUSTIFICATION:

This program provides for procurement and installation of safety, required fielding, and operability modifications to core AEGIS Weapon System (AWS) elements.

These requirements continue through the life of the ships.

#### DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	<u>P</u> QTY	RIOR \$	FY 2 QTY	2004 \$	FY:	200 <u>5</u>	FY 2 QTY		<u>FY</u> QTY	<u>2007</u> \$	<u>FY</u> QTY	2008		2009	FY 2 QTY	2 <u>010</u> \$	FY 2		OTV	TC f	<u>TO</u> QTY	TAL
	QIY	\$	QIY	\$	QIY	\$	QIY	•	QIY	\$	QIY	\$	QTY	\$	QIY	\$	QTY	\$	QTY	\$	QIY	\$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																						
PROCUREMENT																						
INSTALLATION KITS																						
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						
EQUIPMENT	VAR	56.7			VAR	6.7	VAR	7.8	VAR	4.1	VAR	6.0	VAR	6.0	VAR	6.0	VAR	6.0	VAR	TBD	VAR	99.3
EQUIPMENT NONRECURRING																						
ENGINEERING CHANGE ORDERS																						
DATA																						
TRAINING EQUIPMENT																						
SUPPORT EQUIPMENT																						
OTHER																						
OTHER																						
OTHER																						
INTERIM CONTRACTOR SUPPORT																				-		
INSTALL COST		27.7				3.1		2.1		2.2		2.6		3.1		3.1		3.1		TBD		47.0
TOTAL PROGRAM COST		84.4				9.8		9.9		6.3		8.6		9.1		9.1		9.1		TBD		146.3

P-1 SHOPPING LIST

CLASSIFICATION: UNCLASSIFIED

OLAGOII IOA IION: OI		,	,																											
P3A (Continued)				INDI	IVIDU	AL MC	DIFIC	CATION (	Conti	nued)																				
MODELS OF SYSTEMS	AFFEC	TED:		AWS	8				М	ODIFICAT	ION	TITLE:			ORDNAN	CE ALTER	RAT	TIONS			L7010	_								
INSTALLATION INFORM	ATION	:																												
METHOD OF IMPLEMEN	ITATIO	N:	AIT (	(PHD)		_																								
ADMINISTRATIVE LEAD	TIME:	1 - 2	Months					PRODUC	TION	LEADTIM	1E:		12 mont	hs																
CONTRACT DATES:				_				FY 2005:			Jan	uary 05				FY 2006:		March	n 06		FY	2007:	January 0	7						
DELIVERY DATE:	F	Y 2004				_		FY 2005:		_		nuary 06	_			FY 2006:		March		-		2007:	January 0							
DELIVERY DATE.	•	. 200.				-		2000.			- Oct.		_			2000.		- Maron		-	• •	2007.	bandary or							
04		-: \/-			F)//	2004			FV 0	005			Millions)	_	EV.	0007		EV.	2000	EV	7.0000		/ 0040		-V 0044		T- 0-			-4-1
Cost:	Qty	rior Ye	ars \$		Qty	2004		Qtv	FY 2	\$	-	Qty	2006 <b>\$</b>	-1	Qty	2007	+	Qtv	2008 <b>\$</b>	Qty	2009	Qtv	<sup>7</sup> 2010	Qtv	FY 2011		To Co	mpiete \$	Qty	otal \$
	Ψι,		Ψ	ľ	kty	Ψ		Qty			_	Qty		1	Qty	_ *	1	Qty	•	Qty	<b>-</b> *	Qty		Qty	-	$\dashv$	Qty		Qiy	_ •
PRIOR YEARS	VAF	₹	20.4														1												VAR	20.4
FY 2003 EQUIPMENT	VAF	2	3.8						1								1												VAR	3.8
FY 2004 EQUIPMENT								VAR		3.1							1												VAR	3.1
FY 2005 EQUIPMENT												VAR	2.1				1												VAR	2.1
FY 2006 EQUIPMENT															VAR	2.2	1												VAR	2.2
FY 2007 EQUIPMENT																		VAR	2.6										VAR	2.6
FY 2008 EQUIPMENT																				VAR	3.1								VAR	3.1
FY 2009 EQUIPMENT																						VAR	3.1						VAR	3.1
FY 2010 EQUIPMENT																								VAF	3.1				VAR	3.1
FY 2011 EQUIPMENT																	1												<u> </u>	
TO COMPLETE																								<u> </u>			VAR	TBD	VAR	TBD
INSTALLATION SCHEDU	JLE:																													
	<u> </u>	rior Ye	ar		FY:	2004			FY 2	005		FY	2006		FY	2007		FY 2	2008	FY	2009	E	<u>′ 2010</u>		FY 2011				Total Qty	Total Cost
	1	2 :	3 4	1	2	3	4	1 2		3	4	1 2	3	4	1 2	3 4	1	1 2	3 4	1 2	3 4	1 2	3 4	1	2 3	4				
IN	var	var v	ar var	var	var	var	var	var va	r	var v	var	var var	var v	ar	var var	var va	ır ۱	var var	var var	var vai	r var va	ır var va	r var var	r var	ar var	var				
OUT	var	var v	ar var	var	var	var	var	var va	r	var v	var	var var	var v	ar	var var	var va	ır	var var	var var	var vai	r var va	ır var va	r var var	r var	ar var	var				
																						P-3A								
														_			_													

P-1 SHOPPING LIST

CLASSIFICATION: UNCLASSIFIED

P3A

MODELS OF SYSTEM AFFECTED: TYPE MODIFICATION: <u>AWS SHIPALTS</u> MODIFICATION TITLE: <u>L7011</u>

DESCRIPTION/JUSTIFICATION:

This program provides for procurement of material required to support installation of safety, fielding, and operability modifications. These requirements continue through the life of the ships. These SHIPALTS vary in scope and will be installed primarily by Alteration Installation Teams and in Public or Private Shipyards.

#### DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	<u>PF</u> QTY	RIOR \$	<u>FY</u> QTY	2004 \$	FY 2 QTY			<u>2006</u> \$		<u>2007</u> * \$		2008 \$	<u>FY</u> QTY	<u>2009</u>	<u>FY:</u> QTY	2010 \$	FY 2 QTY	2 <u>011</u> \$	QTY	<u>TC</u> \$	<u>T(</u> QTY	OTAL \$
FINANCIAL PLAN (IN MILLIONS)		*				•						•		*		*		*		7		
RDT&E																						
<u>PROCUREMENT</u>																						
INSTALLATION KITS																						
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						
EQUIPMENT	VAR	165.1			VAR	16.0	VAR	23.8	VAR	26.6	VAR	28.6	VAR	32.9	VAR	32.6	VAR	32.6	VAR	TBD	VAR	358.2
EQUIPMENT NONRECURRING																						
ENGINEERING CHANGE ORDERS																						
DATA																						
TRAINING EQUIPMENT																						
SUPPORT EQUIPMENT																						
OTHER																						
OTHER																						
OTHER																						
INTERIM CONTRACTOR SUPPORT																						
INSTALL COST		42.0				10.5		7.0		5.4		6.0		4.2		6.2		8.0		TBD		89.3
TOTAL PROGRAM COST		207.1				26.5		30.8		32.0		34.6		37.1		38.8		40.6		TBD		447.5

P-1 SHOPPING LIST

CLASSIFICATION: UNCLASSIFIED

CLASSIFICATION. OI	102/	0011 IL																				
P3A (Continued)			INDIVIDU	JAL MODIFI	CATION (C	Continued)																
MODELS OF SYSTEMS	AFFECTE	D:	AWS		=	MODIFICA	TION TITL	<u>E:</u>	AWS SH	P ALTERATIO	ONS	_		L7011								
INSTALLATION INFORM	ATION:																					
METHOD OF IMPLEMEN	ITATION:	Publ	lic & Private	Shipyard A	vailabilities	s; AIT																
ADMINISTRATIVE LEAD	TIME:	1 - 2 Mont	hs		PRODUC	TION LEAD	TIME:	12 Months	3													
CONTRACT DATES:	FY 2	2004:			FY 2005:	Fe	bruary 05			FY 2006:	April	06		FY 20	007:	February 0	17					
DELIVERY DATE:		2004:			FY 2005:		bruary 06	_		FY 2006:	April		_	FY 20		February 0						
								(\$ in Million	s)													
Cost:	Prio	r Years	FY	2004	FY	2005		2006		Y 2007	FY	2008	FY	2009	FY	2010	FY	2011	To Co	mplete	Te	otal
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS	VAR	29.9																			VAR	29.9
FY 2003 EQUIPMENT	VAR	12.1																			VAR	12.1
	VAN	12.1																				
FY 2004 EQUIPMENT					VAR	10.5					+										VAR	10.5
FY 2005 EQUIPMENT			1				VAR	7.0			-										VAR	7.0
FY 2006 EQUIPMENT									VAR	5.4											VAR	5.4
FY 2007 EQUIPMENT											VAR	6.0									VAR	6.0
FY 2008 EQUIPMENT													VAR	4.2							VAR	4.2
FY 2009 EQUIPMENT															VAR	6.2					VAR	6.2
FY 2010 EQUIPMENT																	VAR	8.0			VAR	8.0
FY 2011 EQUIPMENT																	Vitt	0.0			77.11	0.0
TO COMPLETE			1				<u> </u>	l .	1			<u> </u>							VAR	TBD	VAR	TBD
INSTALLATION SCHEDU	JLE:				-11-		ı.															
		o <u>r Year</u> 3 4		<u>' 2004</u> 3 4	1	2005 3 4		2006 3 4	_	Y 2007 3 4		2008 3 4		2009 3 4		2010 3 4		2011 3 4			Total Qty	Total Cost
									1													
										var var												
001	var vai	var var	var var	var var	var var	var var	var va	var vai	var va	var var	var var	var var	var var	var var	var var	var var	var var	var var				
															P-3A							

P-1 SHOPPING LIST

CLASSIFICATION: UNCLASSIFIED

TOTAL PROGRAM COST

0.0

MODELS OF SYSTEM AFFECTED: TYPE MODIFICATION: DDG - COTS REFRESH MODIFICATION TITLE: L7025 DESCRIPTION/JUSTIFICATION: Funds will be utilized to procure and install AWS COTS refresh equipment in support of refreshing the combat systems computing plants and displays on the DDGs. DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: **PRIOR** FY 2006 FY 2007 FY 2008 FY 2009 FY 2010 FY 2011 QTY QTY \$ QTY \$ QTY \$ QTY \$ QTY \$ QTY \$ QTY \$ QTY \$ QTY \$ QTY FINANCIAL PLAN (IN MILLIONS) RDT&E **PROCUREMENT INSTALLATION KITS INSTALLATION KITS - UNIT COST** INSTALLATION KITS NONRECURRING EQUIPMENT/INSTALLATION 0 0.0 55.7 5 58.0 53.0 21 TBD 34 166.7 **EQUIPMENT NONRECURRING** 0.0 TEST EQUIPMENT 0.0 TRAINING EQUIPMENT 0.0 SUPPORT EQUIPMENT 5.0 5.0 10.0 **ENGINEERING** 0.0 LOGISTICS 0.0 **TRAINING** 0.0 ENGINEERING CHANGE PROPOSALS 0.0 INSTALL COST 40.0 32.0 25 TBD 72.0 34

P-1 SHOPPING LIST

0.0

CLASSIFICATION: UNCLASSIFIED

85.0 TBD TBD

TBD

248.7

55.7

5.0

98.0

ITEM NO. 105 PAGE NO. 16

5.0

P3A (Continued)					INDIV	/IDUA	L MO	DIFIC	CATIO	N (Co	ontinu	ed)																										
MODELS OF SYSTEMS	AFFE	CTED	):		AWS						MODI	FICAT	TION T	TITLE:	DDG -	- COT	S RE	FRES	Н							-	L7025											
INSTALLATION INFORM	IATIO	N:																																				
METHOD OF IMPLEMEN	ITATI	ON:	Public	& Pi	rivate	Shipy	ard A	vailab	oilities:	: AIT																												
ADMINISTRATIVE LEAD									PROD	DUCT	ION L	EADT	IME:	12 m	onths				_																			
CONTRACT DATES:	-	FY 200	)4:				_		FY 20	05:	_		N/A		_				FY 20	06:	1	N/A					FΥ	2007	7:	N/A								
DELIVERY DATE:	-	FY 200	)4: _				-		FY 20	05:	_		N/A		_				FY 20	06:	1	N/A					FY	2007	7:	N/A		_						
														(5	in Mill	ions)																						
Cost:		Prior \				FY 2				FY 2					2006				2007			FY 2				FY 20				2010			2011			mplete		otal
	Q	ty	\$	_	Qt	ty	\$		Qt	y	\$		Qt	ty	\$		C	Qty	\$	5	Qt	y	\$		Qty	у	\$	_	Qty	\$	-	Qty	\$		Qty	\$	Qty	\$
PRIOR YEARS	C	)	0.0																																		0	0.0
FY 2003 EQUIPMENT																																					0	0.0
FY 2004 EQUIPMENT																																					0	0.0
FY 2005 EQUIPMENT																																					0	0.0
FY 2006 EQUIPMENT																																					0	0.0
FY 2007 EQUIPMENT																																					0	0.0
FY 2008 EQUIPMENT																																					0	0.0
FY 2009 EQUIPMENT																													4	40							4	40.0
FY 2010 EQUIPMENT																																5	32				5	32.0
FY 2011 EQUIPMENT																																			25	TBD	25	TBD
TO COMPLETE																																				TBD	0	TBD
INSTALLATION SCHEDI	JLE:																																					
		Prior '	<u>Year</u>			FY 2	2004			FY 2	2005			FY	2006			FY:	2007			FY 20	800			FY 20	009		FY	2010		FY	2011				Total Qty	Total Cost
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1 2	3 4	4	1 2	3	4				
IN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (	0 2	2	0	1 2	2	0			34	TBD
OUT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (	0 1	2	1 (	0 2	1	2				
																												_										
																												P-	3A									

P-1 SHOPPING LIST

CLASSIFICATION: UNCLASSIFIED

P3A																						
MODELS OF SYSTEM AFFECTED:	TYP	E MOE	DIFICA	NOITA	СОМ	BAT SI	JPPO	RT SH	IIPAL1	S	_		MOD	IFICA	TION T	ITLE:		L7070	<u>)</u>			
DESCRIPTION/JUSTIFICATION: Funds will be used to procure and	install no	n-com	bat sy	/stems	relate	d Ship	Alts															
DEVELOPMENT STATUS/MAJOR DEVELOPM	ИENT MI	LEST	ONES	s:																		
		RIOR \$	<u>FY</u> QTY	<u>2004</u> ′\$	<u>FY</u> QTY	<u>2005</u> \$	<u>FY</u> QTY	2006 \$	<u>FY</u> QTY	<u>2007</u> \$	<u>FY</u> QTY	<u>2008</u> \$	<u>FY</u> QTY	2009 \$	FY 2 QTY	2 <u>010</u> \$	FY 2 QTY	2 <u>011</u> \$	QTY	TC \$	<u>TO'</u> QTY	TAL \$
FINANCIAL PLAN (IN MILLIONS)														•		·						
<u>RDT&amp;E</u>																						
<u>PROCUREMENT</u>																						
INSTALLATION KITS																						
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						
EQUIPMENT	VAR	10.3			VAR	7.1	VAR	10.8	VAR	10.0	VAR	11.4	VAR	4.0	VAR	4.0	VAR	4.0	VAR		VAR	61.6
EQUIPMENT NONRECURRING																						
ENGINEERING CHANGE ORDERS																						
DATA																						
TRAINING EQUIPMENT																						
SUPPORT EQUIPMENT																						
LOGISTICS																						
TRAINING																						
SITES EQUIPMENT																						
INTERIM CONTRACTOR SUPPORT																						
INSTALL COST		1.0				1.7		2.0		2.0		2.0		2.0		2.0		2.0			VAR	14.7
TOTAL PROGRAM COST		11 3				8.8		12.8		12.0		13.4		6.0		6.0		6.0				76.3

P1 SHOPPING LIST

CLASSIFICATION: UNCLASSIFIED

02:100::10:11:0:11																																		
P3A (Continued)				INE	IVIDU	AL MO	DIFIC	ATION (	(Contin	ued)																								
MODELS OF SYSTEM	S AFI	ECTE	D:	AW	S				MOD	IFICAT	TION T	TTLE: C	COMBAT	SU	PPORT S	HIPAI	_TS						L7070	_										
INSTALLATION INFOR	RMATI	ON:																																
METHOD OF IMPLEMI	ENTA	TION:	Public 8	k Priva	te Ship	yard A	vailab	ilities; A	<u>IT</u>																									
ADMINISTRATIVE LEA	NITO	E:	1 - 2 mc	onths			F	PRODU	CTION	LEADT	IME:	6 to 12	months																					
CONTRACT DATES:			004:					FY 2005			nuary					FY 20	006:	M	arch (	06			FY:	2007:		January	07							
DELIVERY DATE:			004:					FY 2005			nuary					FY 20	006:	M	arch (	)7	_		FY:	2007:		January								
																					_													
Cost:		Prior	Years		EV	2004	- 1	F	Y 2005			(\$ i	n Millions	<u>;)</u>	EV	2007			FY 20	ΩR		FY 2	2000		FV	2010	-	EV	2011	- 1	To Co	mplete	To	otal
0001.		Qty	\$		Qty	\$		Qty		\$	Qt		\$	†	Qty	2007	•	Qty		\$	Q		\$		Qty	\$		Qty	\$		Qty	\$	Qty	\$
PRIOR YEARS		0	0.0																														VAR	0.0
FY 2003 EQUIPMENT		/AR	1											Ī										Ī									VAR	1.0
FY 2004 EQUIPMENT								VAR	1	.7				T																			VAR	1.7
FY 2005 EQUIPMENT											VA	.R	2.0																				VAR	2.0
FY 2006 EQUIPMENT	г														VAR	2	.0																VAR	2.0
FY 2007 EQUIPMENT	г																	VAR	₹	2.0													VAR	2.0
FY 2008 EQUIPMENT	г																				VA	١R	2.0										VAR	2.0
FY 2009 EQUIPMENT	г																							\	/AR	2.0							VAR	2.0
FY 2010 EQUIPMENT	г																											VAR	2.0	)			VAR	2.0
FY 2011 EQUIPMENT	г													_																				
TO COMPLETE																															VAR	TBD	VAR	TBD
INSTALLATION SCHE	DULE	:																																
			Year			2004			Y 2005			FY 2				2007			FY 20			FY 2				2010			2011				Total Qty	Total Cost
	1		3 4			3			2 3		1	2		1		3				3 4	1		3 4			3 4			3					
•	N 0																						var va											
	0	- 0	0 (	val	val	vai	vai	vai V	ai vai	val	vai	vai	vai V	AI .	vai vai	val	vai	vai V	vai '	vai vai	vai	va:	vai va	ı val	val	vai V	ui V	aı val	vai	vai				
																								P-3	A									

P-1 SHOPPING LIST

CLASSIFICATION: UNCLASSIFIED

		BUDGET	TITEM JUSTI	FICATION SI	HEET					DATE:	
			P-40	)						Feb	ruary 2006
APPROPRIATION/BUDGET ACTIVITY						P-1 ITEM N	OMENCLA	TURE			
Other Procurement, Navy /											
BA-4 Ordnance Support Equipment						525000, SI	JRFACE TO	MAHAWK	SUPPORT E	QUIPMENT	
Program Element for Code B Items:						Other Rela	ted Program	Elements			
Not Applicable						0204229N					
	Prior Years	ID Code	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Complete	Total Program
Quantity											
Cost (\$M)	\$1630.6	Α	\$70.2	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1700.7
Spares Cost (\$M)			\$1.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$1.3

<sup>\*</sup> Note: Beginning in FY06 the Surface and Submarine Tomahawk Support Equipment is budgeted in BLI 525300.

Advanced Tomahawk Weapons Control System (ATWCS) (06000) procures Tomahawk Weapon Systems (TWS) hardware and software upgrades resulting from RDT&E, N initiated improvements, operational requirements, Desert Storm lessons learned, fleet systems reviews, and Land Base Test Site (LBTS) testing. This element funds the procurement of ATWCS which provides state-of-the-art open system architecture, greater graphical display, improved interface, increased mission storage capacity, and improved flexibility and responsiveness.

Tactical Tomahawk Weapons Control System (TTWCS) (06001) procures, installs hardware and provides software support and integration of TTWCS, the first in a series of phased replacements of the COTS/GOTS based Weapons Control System (WCS) for the TWS. The primary objective of the TTWCS is the upgrade of the ATWCS hardware as part of the Tactical Tomahawk Program (TTP), including the enhanced performance and efficient execution of new capabilities while maintaining compatibility with existing weapon systems. The TTWCS unit cost includes cost of TTWCS installation and crew training of both TTWCS and Tomahawk Communications System (TCOMMS) hardware.

<u>Weapon Control System Product Improvement (06002)</u> provides for the COTS/GOTS refreshment, engineering changes, software support, also installation, and infrastructure to maintain compatibility and interoperability of existing and future systems. Required to utilize Selective Availability Anti-Spoofing Module GPS(SAASM) Capabilities by Tactical Tomahawk Weapons Control System modifications.

Installation of Equipment (07001) Installs of TCOMMS from FY04 through FY05.

Tomahawk Command and Control System (TC2S) Product Improvements (08000) procures required software improvements. Tomahawk mission planning is highly dependent on mapping, charting and geodesy products from National Imagery and Mapping Agency (NIMA) and imagery from national systems. Transmitting the missions to Tomahawk capable platforms depends entirely on the Navy communications system which is continually improved and updated on a regular basis, many times annually. This funding allows TC2S to retain compatibility with, and exploit the capabilities of these systems. Afloat Planning System (APS), a shipboard based version of TC2S, is included in this line. Required to utilize Selective Availability Anti-Spoofing Module GPS(SAASM) Capabilities by Tomahawk Command Control Systems.

Tomahawk Communications (TCOMMS) (08001) TCOMMS hardware/software provides network connectivity for submarine and surface combatant TTWCS users and embarked Staff (functioning as Launch Area Coordinators) to communicate with in-flight missiles. Previously budgeted in the Tomahawk Command and Control System (TC2S) Product Improvements (08000) line, TCOMMS was broken out separately in FY 2004 to distinguish submarine/surface combatant requirements from carrier requirements (remaining TC2S line is applicable to Carriers alone).

Tomahawk Blk IV Integrated Training Architecture (08002) provides Tactical Tomahawk Fleet Battle Group Staff training.

	WEAPONS SYSTEM COST ANALYSIS	Weapon S	System									DATE:			
	P-5												February 2006		
APPROP	RIATION/BUDGET ACTIVITY								ID Code	P-1 ITEM NO	OMENCLATUR	RE			
OTHER	R PROCUREMENT, NAVY/									525000,	SURFACE	TOMAHAW	K SUPPORT EQL	JIP	
BA-4 O	ordnance Support Equipment								Α						
		ID	Dollars in Thousa	ands											
		Code	Prior Years		FY 2005			FY 2006			FY 2007				
			T. 10	QTY		T. 10	0771		T. 10	0.77		T			
Cost Code	Element of Cost		Total Cost	QIY	Unit Cost	Total Cost	QTY	Unit Cost	Total Cost	QTY	Unit Cost	Total Cost			Ь——
06000	ADVANCED TOMAHAWK WEAPONS CONTROL SYSTEM (ATWCS)		624,052												
06001	TACTICAL TOMAHAWK WEAPONS CONTROL SYSTEM (TTWCS)	Α	31,970	18	1,159	20,862									
06002	WEAPON CONTROL SYSTEM (WCS) PRODUCT SUPPORT		31,141			10,100									
07000	INSTALLATION OF EQUIPMENT (Non-FMP)		25,762												
	INSTALLATION OF EQUIPMENT FMP *1 TOMAHAWK COMMAND AND CONTROL (TC2S) PRODUCT		65,636			2,282									
08000	IMPROVEMENTS		686,860			30,418									
08001	TACTICAL TOMAHAWK COMMUNICATIONS (TCOMMS)	Α	1,452	13	123	1,599									
08002	TOMAHAWK BLK IV INTEGRATED TRAINING ARCHITECTURE		1,995			4,900									
05000	VARIOUS (Product Support)		161,702												
			1,630,570	-		70,161									1

<sup>\*1</sup> Cost code 07001 (Installation of Equipment) accounts for installs of TCOMMS from FY04 through FY05.

BUDGET PROCUREMENT HISTORY AND PL	ANNING	EXHIBIT (F	P-5A)			Weapon System		A. DATI	Ē	
								February	2006	
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 IT	EM NOMENCLATURE			SUBHEA	D
OTHER PROCUREMENT, NAVY /					525000,	SURFACE TOMAHAWK SUPPORT EQUIPME	NT			
BA-4 Ordnance Support Equipment									J۷	15A
				RFP	Contract			Date of	Specs	Date
		Unit Cost		Issue	Method &		Award	First	Available	Revisions
Cost Element/FiscalYear	Qty	(000)	Location of PCO	Date	Type	Contractor and Location	Date	Delivery	Now	Available
06001 TACTICAL TOMAHAWK WEAPONS										
CONTROL SYSTEM (TTWCS)										
						LOCKHEED MARTIN CORPORATION, Valley				
FY 2005	18	1159	NAVAIR	N/A	C/FPI	Forge, PA	12/2004	06/2005	YES	
08001 TACTICAL TOMAHAWK										
COMMUNICATIONS (TCOMMS)										
FY 2005	13	123	NMSA	11/2004	SS-CPFF	COMGLOBAL SYSTEMS, INC, San Jose, CA	04/2005	11/2005	YES	

REMARKS:

FY 07 BUDGET PRODUCTION  APPROPRIATION/BUDGET A  OTHER PROCUREMENT, NA	CTIVITY		•		port Fai	uinm	ent						Wea	pon	Sys	stem			ITE	M N	_	ENC	ĹAT	URI		ORT	FOU	IPMF	NT	
JIIILK I KOOOKLIILKI, KA	VI / BA	7 0.0	iiiaiio.	. oup	port Eq	l		duc	tion	Rate	<del></del>				Pro	cure				nes		1011	AI 1A		,,,,	<u> </u>	LQU			_
Item TWCS FY 05	LOCH	Name	nufact e and l D MAF	Locati		MS 5/Y		EC	ON	M	AX 20		T Pr	-		T Af Oct 1			nitia fg Pl 6			eord fg P			Tota 8		EAC	Mea	it of sure	
COMMS 05	COM	GLOE	AL IN	C, SJ	, CA	N/A					21					6			7						13		EAG	СН		_
										FIS	CAL YE	AR 2	2005									FISC	CAL Y	EAR	2006		ı			T
ITEM / MANUFACTURER	F	S	Q	D	В		2004			1		(	CALEN	DAR	YEAR	2005							CA	LEND	OAR Y	EAR 2	006			
	Y	V C	T Y	L	A L	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U	J J	A U G	S E P	0 C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J L	A U G	S E P	
TWCS	05		18		18			Α						2	2	2	2	2	2	2	2	2								Ŧ
COMMS	05		13		13							Α							2	2	2	2	2	2	1					1
ITEM / MANUFACTURER	F		Q	D	В					FIS	CAL YE		2007 CALEN		V=15							FISC	CAL Y	_	2008 DAR Y					1
HEMI/ MANUFACTURER	Y	S V C	T Y	E	A L	O C T	2006 N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	1
																														1
																														1
																														1

DD Form 2445, JUL 87 Previous editions are obsolete P-1 SHOPPING LIST

311/244 Exhibit P-21 Production Schedule

CLASSIFICATION:

	В	UDGET	ITEM JUS	<b>FIFICATIO</b>	N SHEET					DATE:	
		P-40								February 2	006
APPROPRIATION/BUDGET ACTIV	/ITY					P-1 ITEM	NOMENCL	.ATURE			
Other Procurement, Navy						525300,T	OMAHAW	K SUPPOR	T EQUIPM	IENT	
BA4/Ordnance Support Equipment	nt										
Program Element for Code B Items						Other Rela	ated Progra	ım Element	S		
Not Applicable						0204229N					
	Prior	ID								То	
	Years	Code	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	Complete	Total Program
Quantity											
Cost (\$M)	\$0.0	Α	\$0.0	\$74.1	\$61.2	\$48.8	\$45.4	\$45.9	\$45.9	\$579.9	\$901.1
Spares Cost (\$M)			\$0.0	\$1.6	\$0.8	\$0.9	\$0.0	\$0.0	\$0.0	\$0.0	\$3.3

<sup>\*</sup> Note: Surface (BLI 5250) and Submarine (BLI 5255) Tomahawk Support Equipment programs are merged in FY06. The new, merged program is hereafter referred to as Tomahawk Support Equipment.

Submarine Weapons Control System (WCS) Product Improvement (02002) - provides for COTS/GOTS refreshment, engineering changes, and software upgrades to maintain compatability and interoperability with existing and future systems. The TCOMMS PcMDS (TLAM Core Responsibilities) as well as the J6000 processor conversion requirements are included in this line. Procurement of hardware required to utilize Selective Availability Anti-Spoofing Module GPS (SAASM) Capabilities by Tactical Tomahawk Weapons Control System modifications. Provides software and hardware to support integration and interface testing.

Tactical Tomahawk Weapons Control System (TTWCS) (06001) - procures, installs hardware and provides software support and integration of TTWCS, the first in a series of phased replacements of the COTS/GOTS based Weapons Control System (WCS) for the Tomahawk Weapons System (TWS). The primary objective of the TTWCS is the upgrade of the Advanced Tomahawk Weapon Control System (ATWCS) hardware as part of the Tactical Tomahawk Program (TTP), including the enhanced performance and efficient execution of new capabilities while maintaining compatibility with existing weapon systems. The TTWCS unit cost includes cost of TTWCS installation and crew training of both TTWCS and Tomahawk Communications System (TCOMMS) hardware. FY06 provides funding to procure 19 TTWCS suites. FY07 provides funding to procure 15 TTWCS suites.

Surface Weapon Control System Product Improvement (06002) - provides for the COTS/GOTS refreshment, engineering changes, software support, installation, and infrastructure to maintain compatibility and interoperability with existing and future systems. Required to utilize Selective Availability Anti-Spoofing Module GPS (SAASM) Capabilities by Tactical Tomahawk Weapons Control System modifications.

Installation of Equipment (07001) - Installs of TCOMMS from FY06 through FY09.

	ВІ	JDGET	ITEM JUST	TIFICATIO	N SHEET					DATE:	
		P-40								February 2	006
APPROPRIATION/BUDGET ACTIVIT	TY					P-1 ITEM	NOMENCL	ATURE			
Other Procurement, Navy						525300,T	OMAHAWI	K SUPPOR	T EQUIPM	IENT	
BA4/Ordnance Support Equipment	:										
Program Element for Code B Items:						Other Rela	ated Progra	m Element	S		
Not Applicable						0204229N					
	Prior	ID								То	
	Years	Code	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	Complete	Total Program
Quantity											
Cost (\$M)	\$0.0	Α	\$0.0	\$74.1	\$61.2	\$48.8	\$45.4	\$45.9	\$45.9	\$579.9	\$901.1
Spares Cost (\$M)			\$0.0	\$1.6	\$0.8	\$0.9	\$0.0	\$0.0	\$0.0	\$0.0	\$3.3

Tomahawk Command and Control System (TC2S) Product Improvements (08000) - procures required software improvements. Tomahawk mission planning is highly dependent on mapping, charting and geodesy products from National Imagery and Mapping Agency (NIMA) and imagery from national systems. Transmitting the missions to Tomahawk capable platforms depends entirely on the Navy communications system which is continually improved and updated on a regular basis, many times annually. This funding allows TC2S to retain compatibility with, and exploit the capabilities of these systems. Afloat Planning System (APS), a shipboard based version of TC2S, is included in this line. Required to utilize Selective Availability Anti-Spoofing Module GPS(SAASM) Capabilities by Tomahawk Command Control Systems.

Tomahawk Communications (TCOMMS) (08001) - TCOMMS hardware/software provides network connectivity for submarine and surface combatant TTWCS users and embarked Staff (functioning as Launch Area Coordinators) to communicate with in-flight missiles. Previously budgeted in the Tomahawk Command and Control System (TC2S) Product Improvements (08000) line, TCOMMS was broken out separately in FY04 to distinguish submarine/surface combatant requirements from carrier requirements (remaining TC2S line is applicable to Carriers alone). FY06 provides funding for 19 TCOMMS. FY07 provides funds for 15 TCOMMS.

Tomahawk Blk IV Integrated Training Architecture (08002) - Provides Tactical Tomahawk Fleet Battle Group Staff training.

(Exhibit P-40, page 2 of 5)

	WEAPONS SYSTEM COST ANALYSIS	Weapo	n System									DATE:			
	P-5											February 2006			
APPROP	RIATION/BUDGET ACTIVITY			ID CODE	P-1 IT	EM NOME	NCLATURE								
Other Pro	ocurement, Navy		Α	52530	0, TOMAH	IAWK SUPPORT EQU	JIPMENT								
BA4/Ord	nance Support Equipment														
			Dollars in Th	ousan	ds										
			Prior Years		FY 200	05		FY 200	16		F	Y 2007			
Cost Code	Element of Cost	ID Code	Total Cost	QTY	Unit Cost	Total Cost	QTY	Unit Cost	Total Cost	QTY	Unit Cost	Total Cost			
02002	SUBMARINE WCS PRODUCT SUPPORT								7,200			9,021			
06001	TACTICAL TOMAHAWK WEAPONS CONTROL SYSTEM	Α					19	900	17,100	15	927	13,905			
06002	SURFACE WCS PRODUCT SUPPORT								10,810			9,888			
07001	INSTALLATION OF EQUIPMENT FMP *1								769			3,183			
	TOMAHAWK COMMAND AND CONTROL (TC2S) PRODUCT IMPROVEMENTS *2								32,827			23,283			
08001	TACTICAL TOMAHAWK COMMUNICATIONS (TCOMMS)	Α					19	125	2,375	15	127	1,905			1
	TOMAHAWK BLK IV INTEGRATED TRAINING ARCHITECTURE								3,000						
									74,081			61,185		·	

<sup>\*1</sup> Cost Code 07001 (Installation of Equipment) accounts for installs of TCOMMS from FY06 through FY09.

<sup>\*2</sup> Cost Code 08000 (TC2S) funds provided \$8.4M in FY07 for the modernization of TC2S Subsystems to ensure cruise missile planning agencies and command and control nodes are equipped to meet TLAM mission planning and execution tasking requirements in support of deliberate and Time Sensitive Strike (TSS).

BUDGET PROCUREMENT HISTOI	RY AN	D PLANNI	NG EXHIBIT (P-5A)	)		Weapon System		A. DATI February		
B. APPROPRIATION/BUDGET AC	TIVIT	Υ			C. P-1 IT	I EM NOMENCLATURE			SUBHEAD	)
OTHER PROCUREMENT, NAVY		•			0	525300, TOMAHAWK SUPPORT EQUIPMENT			J45C	
BA4/Ordnance Support Equipment										
				RFP	Contract			Date of	Specs	Date
		Unit Cost		Issue	Method &		Award	First	Available	Revisions
Cost Element/FiscalYear	Qty	(000)	Location of PCO	Date	Type	Contractor and Location	Date	Delivery	Now	Available
06001 TACTICAL TOMAHAWK WEAPONS CONTROL SYSTEM										
(TTWCS)										
						LOCKHEED MARTIN CORPORATION, Valley				
FY2006	19	900	NAVAIR	N/A	C/FPI	Forge, PA	12/2005	06/2006	Yes	
						LOCKHEED MARTIN CORPORATION, Valley				
FY2007	15	927	NAVAIR	N/A	C/FPI	Forge, PA	12/2006	06/2007	Yes	
08001 TACTICAL TOMAHAWK COMMUNICATIONS (TCOMMS)										
FY2006	19	125	NMSA	12/2005	SS-CPFF	COMGLOBAL SYSTEMS, INC, San Jose, CA	04/2006	11/2006	Yes	_
FY2007	15	127	NMSA	12/2006	SS-CPFF	COMGLOBAL SYSTEMS, INC, San Jose, CA	04/2007	11/2007	Yes	

**REMARKS:** 

<b>FY 07 BUDGET PRODUCTION</b>	SCHE	DULE	Ξ, P-2 <sup>-</sup>	1														DATE			Feb	orua	ry 2	2006	;					
APPROPRIATION/BUDGET ACTOMICS OF THE PROCUREMENT,												1	Wea	pon	Sys	stem						ENC <b>VIAH</b>				OR"	T EC	QUIP	,	
							Proc	lucti	on F	Rate					Pro	cure	men	it Le	adtir	nes										
		Ма	nufac	turer's								AL	T Pri	ior	AL	T Aft	ter	I	nitia		Re	eord	er					Uni	t of	
Item		Name	e and	Locati	on	M	SR	EC	ON	MA	Χ	to	Oct	1	(	Oct 1		Mf	fg Pl	_T	Mt	fg Pl	LT	-	Tota	I		Mea	sure	
TTWCS FY 06					VF, PA	5/Y	R			2	0					2			6						8		EAG	CH		
TTWCS FY 07					VF, PA	5/Y	R			2	:0					2			6						8		EAG			
TCOMMS 06	COM	GLOE	BAL IN	C, SJ	, CA	N/A	١			2	:1					6			7						13		EAG	<del>TH</del>		
TCOMMS 07	COM	GLOE	BAL IN	C, SJ	, CA	N/A	١			2	1					6			7						13		EAG	ЭH		
										FISCA	AL YE	AR :	2005									FISC	CAL Y	EAR :	2006					
ITEM / MANUFACTURER	F	S	Q	D	В		2004					(	CALE	NDAF	R YEA	R 200	5						CA	LEND	AR YE	EAR 2	:006			1
	Υ	V	Т	Е	Α	0	N	D	J	F	М	Α	М	J	J	Α	S	0	N	D	J	F	М	Α	М	J	J	Α	s	В
		С	Υ	L	L	С	0	Е	Α			Р	Α	U	U	U	Е	С	Ο	Е	Α	Е	Α	Р	Α	U	U	U	Е	L
						Т	V	С	N	В	R	R	Υ	Ν	L	G	Р	Т	V	С	N	В	R	R	Υ	N	L	G	Р	
TTWCS	06	N	19	0	19															Α						2	2	2	2	11
																											<u> </u>	$\vdash$		
TCOMMS	06	N	19	0	19																			Α			_	$\vdash$		19
TCOMMS	00	IN	19	U	19																			^			┢	$\vdash$		19
																											1			
							•			FISCA	AL YE	AR :	2007	<u> </u>						<u>'</u>		FISC	CAL Y	EAR :	2008					
ITEM / MANUFACTURER	F	S	Q	D	В		2006					(	CALE	NDAF	R YEA	R 200	7						CA	LEND	AR YE	EAR 2	2008			i
	Υ	V	Т	Е	Α	0	N	D	J	F	М	Α	М	J.	J	Α	S	0	N	D	J	F	М	Α	М	J	J	Α	s	В
		С	Υ	L	L	C	0	E	A			P	Α	Ü	Ü	U	E	C	0	E	A	E	Α	Р	Α	Ü	Ü	U	E	A
						Т	V	С	N	В	R	R	Υ	Ν	L	G	Р	Т	V	С	Ν	В	R	R	Υ	N	L	G	Р	
TTWCS	06	N	19	8	11	2	2	2	2	2	1																			0
TTWCS	07	N	15	0	15			Α						2	2	2	2	2	2	2	1						<u> </u>	<u>                                     </u>		0
																											<b>!</b>	$\vdash$		
TCOMMS	06	N	19	0	19		2	2	2	2	2	2	2	2	2	1											<del> </del>	$\vdash$		0
TCOMMS	07	N	15	0	15							A				'			2	2	2	2	2	2	2	1	1		<del> </del>	0
1.00111110	0,	- ' '	10		10		<del>                                     </del>					, ,							_			_	-		_	-				
Remarks:																														

DD Form 2445, JUL 87

Previous editions are obsolete

P-1 SHOPPING LIST

311 / 244

Exhibit P-21 Production Schedule

CLASSIFICATION:

UNCLASSIFIED (Exhibit P-40, page 5 of 5)

	BUDGE	ET ITEM JU	JSTIFICATI	ON SHEE	Т					DATE:	
			P-40							February 2	:006
APPROPRIATION/BUDGET ACTIVITY						P-1 ITEM	NOMENCL	ATURE			
Other Procurement, Navy						525500, S	UBMARIN	E TOMAHA	WK SUPF	ORT EQUI	PMENT
BA4/Ordnance Support Equipment											
Program Element for Code B Items:						Other Rela	ated Progra	m Element	S		
	Prior Years	ID Code	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Complete	Total Program
Quantity											
Cost (\$M)	\$137.8		\$5.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$143.2

Submarine-Advanced Tomahawk Weapon Control System (Sub-ATWCS) (02000) provides open system architecture, extensive hardware (TAC-X) processors, Common Display Console Unit, racks, cables, connectors, etc. and software commonality with surface systems. Sub-ATWCS installation on 688 class submarines is a prerequisite for installation on the Virginia class submarine.

Submarine-Tactical Tomahawk Weapon Control System (Sub-TTWCS/TCOMMS) (02001) provides all capabilities associated with Submarine TTWCS and accommodates the Tactical TOMAHAWK variant. TTWCS for submarines will support the following functions: Receipt of Over the Horizon (OTH) tracking data external to TTWCS; Engagement Planning, Inventory Management of missiles, Strike Planning, Interface with the Combat Control System to transfer engagement plans, TOMAHAWK Mission data, and flight software. Provides software and hardware to support integration and interface testing.

Weapons Control System (WCS) Product Improvement (02002) provides for COTS/GOTS refreshment, engineering changes, and software upgrades to maintain compatibility and interoperability with existing and future systems. The TCOMMS PcMDS (TLAM Core Responsibilities) as well as the J6000 processor conversion requirements were included in this line. Procurement of hardware required to utilize Selective Availability Anti-Spoofing Module GPS (SAASM) Capabilities by Tactical Tomahawk Weapons Control System modifications. Provides software and hardware to support integration and interface testing.

(Exhibit P-5, page 2 of 2)

UNCLASSIFIED

<sup>\*</sup> Note: Beginning in FY06 the Surface and Submarine Tomahawk Support Equipment is budgeted in BLI 525300.

WEA	APONS SYSTEM COST ANALYSIS	Weapon	System									DATE:			
	P-5											February 2006			
APPROP	RIATION/BUDGET ACTIVITY								ID Code	P-1 ITEI	M NOMENO	CLATURE			
OTHER P	PROCUREMENT, NAVY									525500,	SUBMARI	NE TOMAHAWK SU	PPORT EQ	UIPMENT	
BA4/Or	dnance Support Equipment														
			Dollars in Thousa	ands											
			Prior Years		FY 2005			FY 2006			FY	2007			
Cost Code	Element of Cost	ID Code	Total Cost	QTY	Unit Cost	Total Cost	QTY	Unit Cost	Total Cost	QTY	Unit Cost	Total Cost			
02000	SUBMARINE-ATWCS		122,657												
	Production Engineeering		1,391												
02001	SUBMARINE-TTWCS/TCOMMS		9,409			4,255									
02002	WCS PRODUCT IMPROVEMENT		4,417			1,177									
			137,874			5,432									

(Exhibit P-5, page 2 of 2)

		BUDGE	T ITEM JUS	TIFICATION	SHEET			DATE:			
			P-	-40					FEBRU <i>A</i>	ARY 2006	
APPROPRIATION/BI OTHER PROCUF						P-1 ITEM NOM	IENCLATURE				
BA-4 Ordnance	Support Equi	pment				VERTICAL I	AUNCH SYS	STEM BLI 526	60		
Program Element for	Code B Items:					Other Related I	Program Elemer	nts			
						N/A					
	Prior	ID								То	
	Years	Code	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	Complete	Total
QUANTITY			N/A	N/A	N/A	N/A	N/A	N/A	N/A		
COST											
(In Millions)		Α	\$9.8	\$8.5	\$6.6	\$6.8	\$6.9	\$7.2	\$7.4		\$53.1
SPARES COST			_								_
(In Millions)			\$0.8	\$0.9	\$0.8	\$0.8	\$0.8	\$0.8	\$0.8	CONT	\$6.0

#### **SUBMARINES**

The SSN-688 Class Vertical Launch System (VLS) is a weapons system which provides the SSN-688 Class submarines with the capability to carry, status, preset, and launch up to twelve TOMAHAWK cruise missiles from vertical tubes located in the forward non-pressure hull area. This weapons system was added to SSN-688 Class submarines starting with SSN-719 in FY 86 without degrading any existing SSN-688 Class weapons system capabilities or submarine operational characteristics. The VLS launches TOMAHAWK conventional land attack cruise missiles. The TOMAHAWK cruise missile was modified to allow operation in a vertical orientation. VLS was procured and installed under the SCN appropriation. VLS support, test, and handling equipment are provided by this budget line item.

The AUR Simulator is a test and training device that is loaded into a missile tube to simulate an operational encapsulated TOMAHAWK vertical All Up Round (AUR) allowing the VLS to be exercised through the launch phase without actually launching a missile. The AUR Simulator consists of an AUR Electronic Simulator enclosed in a Volumetric Shape. The AUR Electronic Simulator (AURES) simulates the AUR operations either while installed in the Volumetric Shape or in the stand-alone mode via electrical umbilical connection. The Volumetric Shape simulates the weight and shape of an operational AUR, provides a watertight, pressure-proof enclosure for the AURES, and interfaces with the missile tube in a manner similar to an operational AUR so that no damage to the tube will occur during simulation. The missile tube bore gauge is used to verify the proper missile tube clear bore to ensure compatibility with the TOMAHAWK AUR. The AUR loader is a funnel-shaped device which mounts to the missile tube muzzle face. It acts as a guide for the AUR and provides the mechanism to push the AUR down during loading and pull the AUR out of the missile tube during unloading. The Missile Tube Control Panel (MTCP) (SSN 719-725, 750) and the Tube Control Panel (TCP) (SSN 751-773) display the status of the missile tubes, controls the operation of the missile tube hatches, and displays the status of various subsystems.

Legacy items include procurement of Peculiar Support Equipment (PSE) All Up Round Volumetric Shapes, procurement of PSE support equipment, MK 101 Mod 5 upgrade, hydraulics block upgrade modification and hall switch modifications.

Two TCP modifications have been combined. Also, two fairing modifications have been combined.

Long-term changes include improving the AURVS cable, the AURVS Junction Box and Ballast Can covers due to removal problems with existing plug. Improved Ballast Can pads. Platform tent. Commencement of a Mod 5 MK 101 upgrade. Special test equipment. Hall switch upgrade. Improved Fairing Lock Cylinder modification. Hydraulic Actuator pipe flange modification.

P-1 SHOPPING LIST

ITEM NO. 109 PAGE NO. 1

**CLASSIFICATION:** 

UNCLASSIFIED

DD Form 2454, JUN 86

			BUDGET	ITEM JUST	IFICATION S	SHEET				DATE:	
				P-40	0					FEBRUA	<b>ARY 2006</b>
APPROPRIATION/BUD	GET ACTIVITY			P-1 ITEM NO	MENCLATURE						
OTHER PROCURE	MENT,NAVY										
BA-4: Ordnance Su	ipport Equip	ment			'	/ERTICAL L	<b>AUNCH SUF</b>	RFACE SYS	TEM BLI 52	60	
Program Element for Co	de B Items:			Other Related	Program Elem	ents					
	FY 2004 and Prior	ID Code	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Complete	Total Program
QUANTITY			N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A
COST (\$M)											
Initial Spares (\$M)											

#### PROGRAM DESCRIPTION/JUSTIFICATION:

#### SURFACE

The MK-41 Vertical Launching System (VLS) is a surface combatant missile launching system, designed to store, select and launch various STANDARD Missile configurations, TOMAHAWK, Tactical TOMAHAWK, EVOLVED SEASPARROW (ESSM) and Vertical Launch ASROC (VLA) missiles. The MK-41 VLS significantly improves missile capacity, flexibility, multi-mission capability, reaction time and rate of fire and is designed to be adaptable to present and future weapon systems. Current configurations are: two 61 cell launchers, forward and aft, for 22 TICONDEROGA (CG 47) Class Cruisers beginning with CG-52; one 61 cell aft and one 29 cell launcher forward for 28 ARLEIGH BURKE (DDG 51) Class Destroyers; and one 64 cell launcher aft and one 32 cell launcher forward for 34 DDG 51 FLT IIA ships.

The OPN requirements are to procure ORDALT kits and fund government field activity support for ORDALT installation planning, provide sustaining engineering support to MK-41 VLS ships in the fleet, and procure test equipment/special tool replacement in support of ship ROH/SRA testing. The MK-41 VLS program has requirements to: a) Procure ORDALTs for Tactical TOMAHAWK BLK IV for DDG-51 and CG-47 classes; b) Conduct engineering investigations of 8 to 12 inadvertent deluges and 4 to 6 missile duds per year in order to minimize future material damage; c) Collect, investigate, and prioritize computer program trouble reports; d) Investigate discrepancies in, update, and correct shipboard Allowance Equipment Lists (AELs), Consolidated Onboard Ship Allowance Lists (COSALs), and configuration lists; e) Provide ORDALT production engineering support. The increase in FY05-07 are for the procurement of Safety Ordnance Alterations.

DD Form 2454, JUN 86 P-1 SHOPPING LIST CLASSIFICATION:

ITEM NO. PAGE NO.

**UNCLASSIFIED** 

109

#### **UNCLASSIFIED** CLASSIFICATION:

	WEAPONS SYSTEM COST ANAL P-5	YSIS			W	/eapon Syste									ARY 2006
Other P	RIATION/BUDGET ACTIVITY rocurement, Navy					ID Code		OMENCLATUR						SUBHEAD:	
BA-4 Or	dnance Support Equipment	1	T				Vertical L	aunch Syst	ems BLI: 5	26000/05				A45A	
			TOTAL COST	IN THOUSA	NDS OF DOL	LARS									
COST CODE	ELEMENT OF COST	ID Code	Prior Years					FY 2005	_		FY 2006	_		FY 2007	
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
	SUBMARINES														
	AUR ELECTRONIC SIMULATOR Shape/skid Assembly	A													
	Additional skids						46	26	1,196						
	Internal Load Bank Thermal Protection Improved AURVS Cable						27	10	270	24	11	264	29	12	348
	Improved AURVS Junction Box						27	7	189	24	8	192	29	9	261
	Improved Ballast Can Covers						57	4	228	55	5	275	54	6	324
	Improved Ballast Can Pads						57	3	171	55	4	220	51	5	255
	Improved Platform Tent						7	6	42	9	7	63	9	8	72
5A102	AUR ELECTRONIC SIMULATOR	Α													
	Tactical Tomahawk Kit Mod 4						28	21	585	13	22	281			
	Mod 5 TBD						1	608	608	1	412	412	22	28	606
5A107	LOADING SUPPORT EQUIPMENT	Α													
	Miscellaneous support equipment								200			180			205
5A116	FACILITY HARDWARE	A							162			293			155
	SUBTOTAL (SUBMARINES)	•							3,651			2,180			2,226

CLASSIFICATION: DD FORM 2446, JUN 86 ITEM NO. 109 PAGE NO.

3

	WEAPONS SYSTEM COST ANA P-5	LYSIS				Weapon Sy	/stem								ARY 2006
	RIATION/BUDGET ACTIVITY					ID Code	P-1 ITEM N	OMENCLATU	RE/SUBHEAD	1				SUBHEAD:	
	rocurement, Navy rdnance Support Equipment						Vertical I	aunch Sve	tems BLI:	526000/05	1			A45A	
DA 4 0	Tunance Support Equipment		TOTAL COS	T IN THOUS	SANDS OF DO	LLARS	Verticari	aunen oya	tems bei.	320000703	<u> </u>			ATVA	
COST	ELEMENT OF COST	ID	Prior					FY 2005			FY 2006			FY 2007	
CODE		Code	Years Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
5A118	SHIPALT MATERIAL														
	4293KP TCP Phase II 4143 KP MFD 3/9 Handwheel						1	290	290	3	215	645	2	301	602
	4292 Fairing Block Upgrade						1	295	295	3	298	894	2	290	580
	Hydraulic Block Upgrade Hall Switch						1	134	134	5	69	345	6	71	426
	(TBD) MTCP Equivalent of 4293						1	720	720	3	180	540	2	190	380
5A6IN	NON-FMP INSTALLATIONS														
5AINS	FMP INSTALLATIONS								829			1,215			1,659
	SUBTOTAL (SUBMARINES)								2,268			3,639			3,647
	TOTAL (SUBMARINES)								5,919			5,819			5,873

DD FORM 2446, JUN 86 P-1 SHOPPING LIST CLASSIFICATION:

	WEAPONS SYSTEM C P-5	OST AN	IALYSIS			Weapon S	ystem							DATE: FEBRUA	RY 2006
Other Pi	RIATION/BUDGET ACTIVITY Cocurement, Navy rdnance Support Equipment					ID Code		MENCLATUR		26000/05				SUBHEAD	A45A
	quipmont =quipmont		TOTAL COS	T IN THOUS	ANDS OF DO	LLARS	Tortiour E	aunon Oyor	<u> </u>	,					711071
COST	ELEMENT OF COST	ID Code	Prior Years Total Cost	Quantity	Unit Cost	Total Cost	Quantity	FY 2005 Unit Cost	Total Cost	Quantity	FY 2006 Unit Cost	Total Cost	Quantity	FY 2007 Unit Cost	Total Cost
	SURFACE			,			,			,					
5A003	VLS ORDALTS								3,146			2,180			42
5A830	PRODUCTION ENGINEERING								650			485			210
5A870	SPEC TOOLING/TEST EQUIP														
5A900	CONSULTING SERVICES														
5A5IN	FMP INSTALLATION								48			48			50
ı															
1															
	SUBTOTAL (SURFACE)								3,844			2,713			684
	TOTAL SUBMARINE & SURFACE					P-1 SHOPE			9,763			8,532			6,557

DD FORM 2446, JUN 86 P-1 SHOPPING LIST CLASSIFICATION:

BUDGET PROCUREMENT HISTORY AN	ID PLANNING I	:XHIBII (P	-5A)			Weapon System		A. DATE	BRUARY	2006
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-4 ORDNANCE SUPPORT EQUIPME	ENT					L BENCLATURE LASS VERTICAL LAUNC IR ELECTRONIC SIMULA			SUBHEAD  A45A	2000
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
<u>SUBMARINE</u>		, , ,								
FY2005	46	00	NUNAC	NI/A	l wy	NUMAC NEWDORT	4/05	0/05	VEC	NI/A
Additional skids Improved AURVS Cable	46 27	26 10	NUWC NUWC	N/A N/A	WX WX	NUWC, NEWPORT NUWC, NEWPORT	1/05 11/04	9/05 9/05	YES YES	N/A N/A
Improved AURVS Junction Box	27	7	NUWC	N/A	WX	NUWC, NEWPORT	11/04	9/05	YES	N/A
Improved Ballast Can Covers	57	4	NUWC	N/A	WX	NUWC, NEWPORT	11/04	9/05	YES	N/A
Improved Ballast Can Pads	57	3	NUWC	N/A	WX	NUWC, NEWPORT	11/04	9/05	YES	N/A
Improved Platform Tent	7	6	NUWC	N/A	WX	NUWC, NEWPORT	11/04	9/05	YES	N/A
FY2006										
Improved AURVS Cable	24	11	NUWC	N/A	WX	NUWC, NEWPORT	11/05	9/06	YES	N/A
Improved AURVS Junction Box	24	8	NUWC	N/A	WX	NUWC, NEWPORT	11/05	9/06	YES	N/A
Improved Ballast Can Covers	55	5	NUWC	N/A	WX	NUWC, NEWPORT	11/05	9/06	YES	N/A
Improved Ballast Can Pads	55	4 7	NUWC	N/A	WX	NUWC, NEWPORT	11/05	9/06	YES YES	N/A
Improved Platform Tent	9	′	NUWC	N/A	WX	NUWC, NEWPORT	11/05	9/06	YES	N/A
FY2007										
Improved AURVS Cable	29	12	NUWC	N/A	WX	NUWC, NEWPORT	11/06	9/07	YES	N/A
Improved AURVS Junction Box	29	9	NUWC	N/A	WX	NUWC, NEWPORT	11/06	9/07	YES	N/A
Improved Ballast Can Covers	54	6	NUWC	N/A	WX	NUWC, NEWPORT	11/06	9/07	YES	N/A
Improved Ballast Can Pads Improved Platform Tent	51 9	5 8	NUWC NUWC	N/A N/A	WX WX	NUWC, NEWPORT NUWC, NEWPORT	11/06 11/06	9/07 9/07	YES YES	N/A N/A
mproved Flationn Tent	9	0	NOVVC	IN/A	VV ^	NOVIC, NEVIFORI	1 1/00	9/07	IES	IN/A

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST CLASSIFICATION:

ITEM NO. 109 PAGE NO. 6

**UNCLASSIFIED** 

BUDGET PROCUREMENT HIS	STORY AND P	LANNING	EXHIBIT (P-5A)			Weapon System		a. date <b>FE</b>	BRUARY 2006			
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOM			SUBHEAD				
Other Procurement, Navy BA					SSN 688 C	LASS VERTICAL LAUN	ICH SYS	TEM				
ORDNANCE SUPPORT E	EQUIPMENT					JRES MK101			A45A			
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE		
SUBMARINE		, , ,										
FY2005 Tactical Tomahawk Kit	28	21	NUWC	N/A	WX	NUWC, NEWPORT	11/04	9/05	YES	N/A		
Mod 5 TBD FY2006	1	608	NUWC	N/A	WX	NUWC, NEWPORT	11/04	9/05	YES	N/A		
Tactical Tomahawk Kit Mod 5 TBD	13 1	22 412	NUWC NUWC	N/A N/A	WX WX	NUWC, NEWPORT NUWC, NEWPORT	11/05 11/05	9/06 9/06	YES YES	N/A N/A		
<u>FY2007</u> Mod 5 TBD	22	28	NUWC	N/A	wx	NUWC, NEWPORT	11/06	9/07	YES	N/A		

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST CLASSIFICATION:

ITEM NO. 109 PAGE NO. 7

BUDGET PROCUREMENT HISTORY AN	ID PLANNING I	EXHIBIT (P	P-5A)			Weapon System		A. DATE			
								FEE	BRUARY 2	2006	
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NON			SUBHEAD			
Other Procurement, Navy BA-4						LASS VERTICAL LAUN	CH SYS	ГЕМ			
ORDNANCE SUPPORT EQUIPME	ENT					IIPALT MATERIAL			A45A		
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE	
<u>SUBMARINE</u>											
<u>FY2005</u>		222					1.1/0.1	4/0-	\		
4293KP TCP Phase 2	1	290	NUWC	N/A	WX	NUWC, NEWPORT	11/04	4/05	YES	N/A	
4292 Fairing Block Upgrade		295	NUWC	N/A	WX	NUWC, NEWPORT	11/04	4/05	YES	N/A	
Hall Switch	1	134	NUWC	N/A	WX	NUWC, NEWPORT	11/04	4/05	YES	N/A	
(TBD) MTCP Equivalent of 4293	1	720	NUWC	N/A	WX	NUWC, NEWPORT	11/04	4/05	YES	N/A	
FY2006											
4293KP TCP Phase 2	3	215	NUWC	N/A	WX	NUWC, NEWPORT	11/05	4/06	YES	N/A	
4292 Fairing Block Upgrade	3	298	NUWC	N/A	WX	NUWC, NEWPORT	11/05	4/06	YES	N/A	
Hall Switch	5	69	NUWC	N/A	WX	NUWC, NEWPORT	11/05	4/06	YES	N/A	
(TBD) MTCP Equivalent of 4293	3	180	NUWC	N/A	WX	NUWC, NEWPORT	11/05	4/06	YES	N/A	
FY2007											
4293KP TCP Phase 2	2	301	NUWC	N/A	WX	NUWC, NEWPORT	11/06	4/07	YES	N/A	
4292 Fairing Block Upgrade	2	290	NUWC	N/A	WX	NUWC, NEWPORT	11/06	4/07	YES	N/A	
Hall Switch	6	71	NUWC	N/A	WX	NUWC, NEWPORT	11/06	4/07	YES	N/A	
(TBD) MTCP Equivalent of 4293	2	190	NUWC	N/A	WX	NUWC, NEWPORT	11/06	4/07	YES	N/A	

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST CLASSIFICATION:

ITEM NO. 109 PAGE NO. 8

BUDGET ITEM JUSTII	FICATION SH	EET				DATE <b>F</b> (	ebruary 200	06
APPROPRIATION/BUDGET ACTIVITY			P-1 ITEM N	OMENCLATU	RE			
Other Procurement, Navy			ے ا	trotogio Mic	saila Eveta	ma Fauinn	ant /E2E00	٠٥١
Budget Activity 4 - Ordnance Support Equi	pment		3	trategic Mis	ssile Syste	ins Equipii	ieni (53560	0)
		FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11
QUANTITY		N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cost (in millions)		\$101.4	\$106.7	\$111.1	\$147.0	\$125.4	\$144.7	\$171.3

The SSP funding in this P-1 line provides for the procurement of Strategic Weapons System (SWS) equipment for deployed SSBNs and shore support sites to support the TRIDENT II (D5) program. Included are shipboard subsystem equipment modernization and technical refresh efforts associated with the TRIDENT II (D-5) life extension program. TRIDENT II SSBN hull life has been extended 15 years, extending system life to FY 2042.

#### OTHER MATERIAL SUPPORT

A broad range of other material support equipment must be procured for deployed SSBNs, shore installations and contractor facilities. Included within this category are general and special purpose test equipment, launcher expendables, navigation principal items, test instrumentation in support of missile flight tests, and missile checkout equipment. Amounts included within this P-1 line for this category are subdivided as follows:

	(\$0	00)	
	FY 2005	FY 2006	FY 2007
Launcher and Handling Equipment	3,400	1,700	10,950
Fire Control Equipment	3,400	3,000	3,100
Navigation Equipment	1,600	6,250	450
Instrumentation/Missile Checkout Equipment	5,000	1,800	4,500
Total	\$13,400	\$12,750	\$19,000

Launcher and Handling Equipment: Funding in FY 2005 - FY 2007 is required to procure Launcher Expendables (namely, MK-74 Gas Generators and related production support).

Fire Control Equipment: Funding in FY 2005 - FY 2007 provides for procurement of MK-98 Mod 4 Fire Control System and Support Equipment replacement items onboard SSBNs and at shore sites and for implementation of Capital Maintenance Projects at the Naval Industrial Reserve Ordnance Plant (NIROP) in Pittsfield, MA; these projects are essential to correct environmental, safety, and energy conservation deficiencies.

Navigation Equipment: Funding is required in all years for replacement of worn or damaged items of inertial test equipment used at contractors' plants to support test, evaluation, and analysis of inertial instruments; and for procurement of critical components essential to maintain configuration control and equipment reliability.

Instrumentation/Missile Test Equipment: Funding in all years provides for shore based and shipboard test instrumentation equipment in support of missile flight tests and for procurement of surface support equipment end items to satisfy replacement requirements generated by fleet-related tactical activities. The FY 2007 request includes a satellite communications replacement system for the INMARST Terminal B that will be supportable and current with existing satellite providers and addresses obsolescence issues and improves the Navy Mobile Instrumentation Ship (NMIS) communications link.

DD FORM 2454, JUL 88

P-1 SHOPPING LIST ITEM NO. PAGE NO. 111 1 **EXHIBIT P-40 BUDGET JUSTIFICATION SHEET** 

#### **ALTERATIONS**

Alterations to non-flying tactical hardware are continuing requirements for the Strategic Weapons System (SWS). Requirements primarily relate to shipboard investments in COTS/NDI SWS subsystem equipments, including periodic refresh cycles, to ensure continued reliable performance of the weapon system for its extended service life through FY 2042. Alterations (SPALTs) also entail the application of available technology to eliminate personnel safety hazards, correct design deficiencies, maintain system effectiveness by resolving equipment operability problems, achieve logistic economies, and provide for shipboard subsystem D5 life extension modernization efforts. SPALT estimates include both known alterations related to resolution of specific problems as well as calculated, formula-generated alterations based on recent experience. Amounts included in this P-1 line for alterations are subdivided as follows:

	(\$0	00)	
	FY 2005	FY 2006	FY 2007
Launcher and Handling Equipment	3,900	3,000	8,000
Fire Control Equipment	38,414	48,200	11,200
Navigation Equipment	29,000	32,000	43,000
Instrumentation/Missile Checkout Equipment	2,100	1,050	2,000
Total	\$73.414	\$84.250	\$64.200

Funds are required to procure formula-generated alterations to the Strategic Weapons System launcher and fire control subsystems; to inertial, non-inertial, and Electrostatically Supported Gyro Navigator (ESGN) navigation subsystem equipment on deployed SSBNs and installed at supporting shore facilities, including the TRIDENT Training Facility (TTF), Bangor, TTF, Kings Bay, the Ashore Navigation Center, and the Inertial System Test Laboratory; to test instrumentation used on SSBNs, support ships and at the Eastern Test Range, the TRIDENT Refit Facility (TRF), Bangor, and TRF, Kings Bay; and to missile handling equipment, missile test and readiness equipment, and surface support equipment. Installation of approved SPALTs is performed on a turnkey basis in conjunction with the procurement of equipment. Use of Commercial-off-the-Shelf/Non-Developmental Items (COTS/NDI) has been initiated and is being implemented in all subsystems, wherever possible.

Launcher and Handling Equipment: Funding provides for launcher and handling equipment alterations to address aging and obsolescence issues. FY 2007 funding will provide for the Launcher Firing Unit System Upgrade to address a "single point failure" risk. The current Launcher Subsystem Firing Unit will not meet the SWS life requirements based on current evidence of system degradation due to aging and obsolescence. The upgraded firing system will provide system redundancy, end-to-end circuit testing, and maintain the demonstrated reliability of the firing unit through the end of the program.

Fire Control Equipment: In addition to providing for calculated Fire Control System modifications based on historical experience, funding in all years will allow for implementation of life-cycle cost control initiatives aimed at the integration of TRIDENT II SWS subsystem equipment into the Fire Control system, leveraging off of the MK-98 Mod 4 Fire Control design to implement the first phase of TRIDENT II Shipboard Systems Integration architecture. The product of these SWS integration efforts will be implementation of an affordable design to meet all operational requirements, while minimizing total ownership costs.

Navigation Equipment: The FY 2005 through FY 2007 requests for Navigation equipment alterations will address aging and obsolescence issues by providing for procurement of an updated navigation system, employing an Interferometric Fiber Optic Gyroscope (IFOG) and capable of economically supporting the TRIDENT II SWS throughout its extended service life. FY 2007 request also allows continued Shipboard Systems Integration (Navigation Move to the Missile Control Center (MCC)). The Navigation-Move-to MCC is a component of SSP's on-going strategy to integrate SWS shipboard systems for purposes of long-term program supportability and affordability. The elimination of Navigation work stations, electronic consoles, and other Navigation unique components will significantly reduce total program Navigation subsystem refurbishment costs and potentially reduce Navy MILPERS and training costs.

Instrumentation/Missile Equipment: In addition to formula-generated alterations to Instrumentation/Missile Checkout equipment which are budgeted in all years, the FY 2005 through FY 2007 requests will support implementation of COTS-based alterations to the TRIDENT II M240R Data Recording System.

DD FORM 2454. JUL 88

P-1 SHOPPING LIST ITEM NO. PAGE NO. 111 2 **EXHIBIT P-40 BUDGET JUSTIFICATION SHEET** 

#### TRAINING SUPPORT EQUIPMENT

This category provides for procurement of, and alterations to, both tactical and non-tactical equipment required at submarine training facilities to train personnel in the operation and maintenance of launcher and handling, fire control, navigation, missile checkout, and test instrumentation subsystems. Each training facility consists of an integrated family of system and unit laboratories that interface with a central stimulation complex to provide complete and realistic training for replacement and off-crew personnel, both officer and enlisted, as required for manning of SSBNs and shore facilities. Funding in all years is budgeted to procure training-unique equipment required as the result of alterations to SWS tactical equipment, including those associated with D-5 life extension.

In FY 2005 through FY 2007, funds are required for software and hardware design modification, lab documentation modification, facility modification, and design and system integration, as well as procurement and fabrication of all hardware needed to support MK-98 Mod 6 Fire Control subsystem training at both the TRIDENT Training Facility (TTF), Bangor, and at TTF, Kings Bay. The required effort includes upgrade of the 4-tube cluster to accommodate Mod 6 configuration and integration with the Missile Control Center (MCC) Lab, conversion of the MCC to Mod 6 training configuration, upgrade of documentation, upgrade of the single-tube lab to support Mod 6 training, and development, test, integration and installation of a Power Node Simulator and a PC-based Simulator. Funding in FY 2007 addresses the need for acquisition of upgrades to the Bangor and Kings Bay TTFs resulting from tactical changes in the TRIDENT II (D5) missile under the Life Extension (LE) program. Specifically called for are hardware and software efforts associated with support of D5LE Simulator equipment at both the East and West Coast sites.

 FY 2005
 FY 2006
 FY 2007

 Training Support Equipment
 \$14,559
 \$9,676
 \$15,927

#### **CONVENTIONAL TRIDENT MODIFICATION (CTM)**

Conventional TRIDENT Modification (CTM) adapts the TRIDENT II (D-5) missile system to provide an offensive precision strike capability delivering conventional (non-nuclear) effects at global ranges. CTM will fit existing D5 missiles with new reentry bodies equipped with aerodynamic controls, GPS-aided terminal guidance and a conventional payload. This funding will provide for production and procurement of Launcher System Hardware, production and procurement of Fire Control Hardware, and development of Fire Control software specific to CTM applications. Funds will also provide for the development of tactical software for the SSBNs and training software for installation at the two TRIDENT Training Facilities (TTF).

FY 2007, funds are required for On-Board Modifications of the Launcher and Fire Control Hardware (\$8.3M), Fire Control Software (2.8M) and Trainer Modifications (\$.9M). Outyear funds FY 2008 - FY 2010 are for Fire Control Hardware and Software development and installations.

 FY 2005
 FY 2006
 FY 2007

 Conventional Trident Modification
 \$0
 \$0
 \$12,000

**DD FORM 2454, JUL 88** 

P-1 SHOPPING LIST ITEM NO. PAGE NO. 111 4 **EXHIBIT P-40 BUDGET JUSTIFICATION SHEET** 

# **UNCLASSIFIED**

WEAPON SYST	EM COST A	NALYSIS			DATE:									
EXHIBIT (P-5) PROG	RAM COST	BREAKDOWN				February 2006								
APPROPRIATION/BUDGET ACTIVITY		P-1 ITEM NOMENCLAT			_									
Other Procurement, Navy		Strategic Missile Systems Equipment / 34U9  Total Cost in Thousands of Dollars												
Budget Activity 4 - Ordnance Support Equipm	ent	T	otal Cost											
WEAPON SYSTEM	ldent.		FY 05	Total	FY 06	Total	FY 07	Total						
COST ELEMENTS	Code		Qty	Cost	Qty	Cost	Qty	Cost						
Other Material Support				13,400		12,750		19,000						
Alterations				73,414		84,250		64,200						
Training Support Equipment				14,559		9,676		15,927						
Conventional Trident Modification				0		0		12,000						
Total			\$	101,373		\$106,676	_	\$111,127						

P-1 SHOPPING LIST ITEM NO. PAGE NO.

5

111

# **UNCLASSIFIED**

WEAPON SYSTE	M COST	ANALYS	IS			DATE:	DATE:							
EXHIBIT (P-5) PROGR	AM COS	T BREAK	DOWN			Feb	ruary 2	2006						
APPROPRIATION/BUDGET ACTIVITY		P-1 ITEM NO	OMENCLATU	RE/SUBHEAD										
Other Procurement, Navy				egic Missile Sy										
Budget Activity 4 - Ordnance Support Equipme	ent		Total Cost in Thousands of Dollars											
WEAPON SYSTEM	ldent.	FY 08	Total	FY 09 To	al FY 1	0 Total	FY 11	Total						
COST ELEMENTS	Code	Qty	Cost	Qty Co	st Qty	Cost	Qty	Cost						
Other Material Support			33,800	17,	75	34,300		23,160						
Alterations			93,700	90,0	25	88,700		134,940						
Training Support Equipment			9,515	11,7	57	19,618		13,233						
Conventional Trident Modification			10,000	6,0	00	2,000		0						
		_					•							
Total			\$147,015	\$125,3	57	\$144,618		\$171,333						

P-1 SHOPPING LIST ITEM NO. PAGE NO.

6

111

## **UNCLASSIFIED**

		В	UDGET ITE	M JUSTIFICA	ATION SHEE	Т			DATE:		
				P-40					FEBRUARY 2006		
APPROPRIATION/BU	DGET ACTIVIT	Υ					P-1 ITEM NOM	MENCLATURE			
OTHER PROCUR	EMENT, NA	VY/BA-4	Ordnance S	Support Equi	pment		SUBMARINE AS	SW SUPPORT E	QUIPMENT BL1: 543	3100 SBHD: 846A	
Program Element for C	Code B Items:						Other Related	Program Eleme	ents		
	Prior	ID								То	
	Years	Code	2005	2006	2007	2008	2009	2010	2011	Complete	Total
QUANTITY											
COST											
(In Millions)	\$12.2		\$4.8	\$4.8	\$4.9	\$5.1	\$5.3	\$5.4	\$5.6		\$48.1
SPARES COST											
(In Millions)											\$0.0

#### PROGRAM DESCRIPTION/JUSTIFICATION:

This line item procures modifications and improvements to Attack and Ballistic Missile Submarine fire control interface systems, torpedo tube system components and torpedo tube test equipment. These requirements arise as a result of the introduction of new or modified weapons and sensors and their subsequent evaluation test and operational use. Also procured are reliability, maintainability, functional and safety modifications and tactical improvements resulting from operational use experience.

This line funds modifications and improvements in the following categories:

6A002 - The Submarine Torpedo Tube Support category funds in-service support and alteration procurements for all submarine torpedo tubes ejection pumps, handling systems, and countermeasure launchers. Recurring efforts are CASREP support to the fleet units, emergency ORDALTs, Bore Gage/Test Equipment Procurement, Engineering Change Proposal support and prototype ORDALTs. ORDALTs kits are procured to correct significant deficiencies in equipment affecting personnel safety, ship safety and system performance.

6A5IN - Installing agents will be various Naval Shipyards and contractors. All installations will be on SSN 688/21 Class Submarines.

P-1 SHOPPING LIST

ITEM NO. 112 PAGE NO. 1

CLASSIFICATION:

**UNCLASSIFIED** 

DD Form 2454, JUN 86

# **UNCLASSIFIED**

	WEAPONS SYSTEM C P-5	COST AN	IALYSIS			Weapon S	/stem							DATE: FEBRUARY	2006
	PRIATION/BUDGET ACTIVITY					ID Code	P-1 ITEM N	OMENCLATU	RE/SUBHEA	D					
	Procurement, Navy rdnance Support Equipment						CHDMA	RINE ASW	CLIDDOD	T EALUD	MENT DI	I. E42400	CDUD.	0464	
BA-4 U	Turiance Support Equipment		TOTAL COS	T IN THOUS	SANDS OF DO	DLLARS	SUBIVIA	VIIVE ASVV	JUFFUR	I EQUIP	MENI DE	.1. 343100	зыпь.	040A	
							1		_						
COST	ELEMENT OF COST	ID Code	Prior Years		FY 2005			FY 2006			FY 2007			FY	
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
	SUBMARINE (N77)														
6A002	SUB TORPEDO TUBE SUPPORT	A													
	O/A PROTOTYPE/ECP MATERIAL		1594			787			904			859			
	2J COG MATERIAL		473			245			250			255			
	TEST EQUIPMENT														
	BORE GAGE		526			280			139			132			
	TEST FACILITY EQUIPMENT		3058			436			462			575	i		
	MISC. TEST EQUIPMENT		999			277			255			259			
	TEP ORDALTs/TRIDS														
	O/A 16264 TEP QUIET 1		1736	2	444.0	888	2	451.0	902	2	459.0	918			
	TPES FIRING VALVE														
	TOTAL EQUIPMENT		8,386			2,913			2,912			2,998			
6A5IN	SUBMARINE (N77) INSTALLATION OF EQUIPMENT (FMP)		3,798			1,904			1,861			1,948			
			, , , ,						,,,,,,			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
			12,184			4,817			4,773			4,946			
DD FORM	1.2446 IIIN 86		12,104	l .	l	-,017		PPING I IS		l	l	-,,540	CI ASSIFI	CATION	<u> </u>

DD FORM 2446, JUN 86 P-1 SHOPPING LIST CLASSIFICATION:

ITEM NO. 112 PAGE NO. 2

<b>BUDGET PROCURE</b>	MENT HIST	ORY AND	<b>PLANNING EXHIB</b>	IT (P-5A)		Weapon System		A. DATE		
								FEBRUA	RY 2006	
B. APPROPRIATION/BUDGE					C. P-1 ITEM NON	MENCLATURE			SUBHEAD	
Other Procureme	nt, Navy									
<b>BA-4: ORDNANC</b>	E SUPPO	RT EQU	IPMENT		SUBMARINE	ASW SUPPORT EQUIPME	NT BL1: 5	43100	846A	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
<u>FY 05</u> SUB TORPEDO TUBE O/A 16264 TEP QUIET 1	2	444	NAVSEA		wx	NUWC NEWPORT,RI	JAN 05	OCT 05	YES	
FY 06 SUB TORPEDO TUBE O/A 16264 TEP QUIET 1  FY 07 SUB TORPEDO TUBE O/A 16264 TEP QUIET 1	2	451	NAVSEA NAVSEA		wx	NUWC NEWPORT,RI  NUWC NEWPORT,RI	JAN 06 JAN 07	OCT 06	YES	
D. REMARKS	2	459	INAVSEA		IWA.	NUWC NEWPORT,RI	JANUT	00107	165	

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST Classification:

ITEM NO. 112 PAGE NO. 3

CLASSIFICATION: UNCLASSIFIED					FEBRUARY 2006
P3A	INDIVIDUAL MODIFICA	ATION	SUBMARINE ASW S	JPPORT EQUIPMENT BL1: 543100	
MODELS OF SYSTEM AFFECTED:	SUBMARINE ASW SUPPORT EQUIPMENT	TYPE MODIFICATION:	ORDALT	MODIFICATION TITLE:	SUB TORPEDO TUBE ORDALT
DESCRIPTION/JUSTIFICATION:					
PROJECT UNIT: ORDALT 16264 SUB WEAPON LAUNCH SIGNATURE.	MARINE TORPEDO EJECTION PU	MP MK 5 MODS 15 THROUGH	20 UPGRADE REDUCES	THE DETECTION AND CLASSIFICATION	OF THE SSN 688 CLASS SUBMARINE
IO = 37					

	FY 2004	& Prior	_	FY		2005		2006		2007		2008		2009		2010		<u> 2011</u>		<u>TC</u>	TOTAL	=
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	. \$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																					0	0.0
PROCUREMENT																						
INSTALLATION KITS																					0	0.0
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						0.0
EQUIPMENT	31	10.0			2	0.9	2	0.9	2	0.9	2	0.9	2	1.0	2	1.0	2	1.0			45	16.6
EQUIPMENT NONRECURRING																						0.0
ENGINEERING CHANGE ORDERS																						0.0
DATA																						0.0
TRAINING EQUIPMENT																						0.0
SUPPORT EQUIPMENT																						0.0
OTHER																						0.0
OTHER																						0.0
OTHER																						0.0
INTERIM CONTRACTOR SUPPORT																						0.0
INSTALL COST	31	19.5			2	1.9	2	1.9	2	1.9	2	2.0	2	2.1	2	2.1	2	2.2			45	33.6
TOTAL PROCUREMENT		29.5		0.0		2.8		2.8		2.8		2.9		3.1		3.1		3.2				50.2

CLASSIFICATION: U	NCLA	SSIF	FIED																										ļ	FEBRUAR	₹Y 2006	
P3A (Continued)						INDI	/IDU	AL N	IODI	FICAT	ΓΙΟΝ	(Conti	nued)																			
MODELS OF SYSTE	IS AF	FEC		SUE PP EQ		RINE			<u>-</u> 3100		)IFIC	ATION	TITLE:		SU	в тог	RPED	O TU	BE OI	RDAL	.T 16	264							-			
INSTALLATION INFO		-	:		<b></b>				0100																							
ADMINISTRATIVE LE			•••					•	PR	ODUC	TION	LEAD	TIME:		9 N	IONT	HS															
CONTRACT DATES:	FY	<u>':</u>							FY	2005:			Jan-05						FY 2	2006:		Jan-06				_	FY 2	2007:		Jan-07		
DELIVERY DATE:	FΥ	<b>'</b> :							FY	2005:			Oct-05			_			FY 2	2006:		Oct-06				=	FY 2	2007:		Oct-07		•
															(\$ ir	n Millio	ons)															
os			Years			Υ			Y 20			FY 2			Y 20			FY 20				2009		Y 2010			FY 20			omplete		Total
	Qty	'	\$	Qt	у		<u> </u>	Qty		\$	Qty		\$	Qty		\$	Qty	'	\$	Qty		\$	Qty	:	\$	Qty	;	\$	Qty	\$	Qty	\$
PRIOR YEARS	31	1	9.5		0		0.0																								31	19.5
FY 2004 EQUIPMEN	Т																														0	0.0
FY 2005 EQUIPMEN	Т							2		1.9																					2	1.9
FY 2006 EQUIPMEN	Т										2		1.9																		2	1.9
FY 2007 EQUIPMEN	Т													2		1.9															2	1.9
FY 2008 EQUIPMEN	Т																2	2	2.0	)											2	2.0
FY 2009 EQUIPMEN	т																			2		2.1									2	2.1
FY 2010 EQUIPMEN	Т																						2	2	2.1						2	2.1
FY 2011 EQUIPMEN	т																									2		2.2			2	2.2
TO COMPLETE																																
INSTALLATION SO	HEDL	JLE:																					1									
FY 2004	·		FY 200	<u>05</u>		_		FY	2006	<u> </u>		<u> </u>	Y 2007			<u>FY</u>	2008	<u> </u>		<u> </u>	Y 20	<u> 109</u>		FY 2	<u>010</u>			<u>F`</u>	Y 2011		<u>TC</u>	
& Prio	<u>r</u>	_	1 2	3	<u> </u>	_4_	1	2	3	4	1	2	3	4	1	2	3	_	1	2	3		1	2	3	4	1_	_ 2	3	4		TOTAL
In 31			0 1	1		0	0	1	1	0	0	1	1	0	0		1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	45
Out 31			0 1	1		0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1_	0	0	1	1	0	0	1	1_	0	0	45
										. <del></del>	NO	440																P-3A		NATION:		0015150
										ITEM	NO.	112			5													CLA	SSIFIC	CATION:	UNCLA	SSIFIED

	WEAPONS SYSTEM COST ANA	LYSIS							Weapon Sy	stem							DATE:		
ADDE	P-5 ROPRIATION/BUDGET ACTIVITY								ID O. d.	D 4 ITEM	HOMENIOL A	TUDE/OUDI	EAD				FEBRUARY 20	06	
	Procurement, Navy								ID Code	P-1 IIEM I	NOWENCLA	TURE/SUBH	IEAD						
	Ordnance Support Equipment									SUBMARI	NE ASW SU	IPPORT EQU	JIPMENT B	LI: 543100 S	SUBHEAD: 846	Α			
	1								ı	1									
							T			I			I			T			_
COST		ID Code	Prior Years	FY 2008			FY 2009			FY 2010			FY 2011			To Complet	te	Te	otal
CODE		Code	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Cost	Quantity	Cost
							Luainity	J 3331						J		Luaniny	••••		••••
	SUBMARINE (N77)																		
6A002	SUB TORPEDO TUBE SUPPORT	Α																	
	O/A PROTOTYPE/ECP MATERIAL					871			902			946			992				
	2J COG MATERIAL					260			265			437			477				
	TEST EQUIPMENT																		
	BORE GAGE					132			146			146			146				
	TEST FACILITY EQUIPMENT					644			661			526			526				
	MISC. TEST EQUIPMENT					277			271			266			257				
	TEP ORDALTs/TRIDS																		
	O/A 16264 TEP QUIET 1			2	467.0	934	2	476.0	952	2	485.0	970	2	494.0	988				
	TPES FIRING VALVE																		
	TOTAL EQUIPMENT					3,118			3,197			3,291			3,386				
	CURMA DINE (NTT)																		
	SUBMARINE (N77)																		
6 A SIN	INSTALLATION OF EQUIPMENT (FMP)					2,031			2,085			2,147			2,206				
OASIN	INSTALLATION OF EQUIPMENT (FMP)					2,031			2,000			2,147			2,200				
	1				t	5,149			5,282			5,438	1		5,592				
DD FO	RM 2446, JUN 86		•	P-1 SHOP	PING LIST	113		•		•			•	•	CLASSIFICAT	ION:			

DD FORM 2446, JUN 86 P-1 SHOPPING LIST 113 CLASSIFICATION:
PAGE NO. €

## **UNCLASSIFIED**

		BUDG	T ITEM JUSTIFICA	ATION SHEE	Т			DATE:			
			P-40						Febru	ary 2006	
APPROPRIATION/BUD	OGET ACTIVIT	Υ				P-1 ITEM NOM	ENCLATURE				
OTHER PROCURE BA 4 - ORDNANCE						ASW	Range Supp	oort Equipme	ent - BLI: 54	5500 SBHD:	846C
Program Element for Co	ode B Items:					Other Related F	Program Elemer	nts			
	Prior Years	ID Code	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY2011	To Complete	Total
QUANTITY											
COST (In Millions)			\$7.126	\$7.136	\$7.188	\$7.395	\$7.530	\$8.023	\$8.187	Continuing	Continuing
SPARES COST (In Millions)											\$0.0

#### ASW RANGE SUPPORT

Funding provides for the procurement of training range and shore support equipment, Test and Evaluation (T&E), and Acoustic Trial range equipment, and weapon system and test support equipment. Equipment procured includes instrumentation for Fleet Operational Readiness Accuracy Check Sites (FORACS) and Naval Undersea Warfare Center, Keyport (NUWC, KPT) T&E ranges, support equipment required to conduct Fleet exercises at Navy ASW Training ranges, Weapon System Accuracy Trials (WSAT) test, and Surface Ship Radiated Noise Measurement (SSRNM). Training and T&E ranges supported include Southern California Offshore Range (SCORE), Barking Sands Tactical Underwater Range/Barking Sands Underwater Range Extension (BARSTUR/BSURE), Atlantic Underwater Test and Evaluation Center (AUTEC), Nanoose, Quinault and Dabob Bay. FORACS ranges supported include Andros Island, Southern California, and Hawaii.

#### 6C001 - Weapon System and Test Support Equipment:

Funding provides for the procurement of high power ESM targets, range communication systems, replacement of obsolete range computers, ship auto-tracking system, Surface Ship Acoustic Range Components, and upgraded ship position tracking system.

#### 6C002 - Training/Test & Evaluation Range Equipment:

Funding provides for the procurement of shipboard underwater tracking equipment for the existing ranges as well as the new Shallow Water Training Ranges on both coasts and in Hawaii, shop special purpose pinger test equipment, and the associated cables/mounting hardware required to track ships and submarines conducting Fleet exercises at the Navy training ranges. NAVSEA provides all of the Navy Underwater Ranges with this tracking equipment support, because the equipment must be compatible with NAVSEA designed and built underwater vehicles (i.e. ships, submarines, torpedoes, mines and sonars).

Funding provides for replacement and modernization of the following NUWC, KPT T&E range systems: Acoustic Noise Measuring Recording and Analysis System, Above Water Tracking System, RF and underwater communications equipment, and range data gathering equipment.

Production support services will fund support efforts performed by a field activity or contractor during the production phase of these projects.

#### **UNMANNED SEABORNE TARGETS PROGRAM**

The Unmanned Seaborne Targets Program provides surface seaborne targets and target electronic augmentation systems for weapons systems test and evaluation and Fleet surface to surface and air to surface training. Target requirements include the High Speed Mobile Sea Target (HSMST), the MK42 Mod 0 Floating At Sea Target (FAST) and the High Speed Anti-Radiation Missile/Infared Missile (HARM/IR) Target, Towed Trimaran, William Sled, and Improved Surface Towed Target (ISTT). Inventory objective changes based on Fleet usage. Procurement of replacement targets for the QST-35 is planned to begin in FY05.

6C001- QST 35 Replacement

6C003, 6C004 - The fleet also requires low cost expendable moving targets and stationary targets towed to the operating site for surface, aerial gunnery and missile shots. Trimarans, HARM/IR target, Williams Sleds, and ISTT with tow lines and retrieval systems meet these requirements. The FAST is a free floating radar reflective target developed as an open ocean training device for bombing and surface gunnery exercises. This program also procures seaborne target augmentation systems which include transponders(i.e. transmitters/receivers), radar reflectors, RF emitters and ground support equipment (GSE). Various electronic components provide the interface for the target control systems with the control stations/facilities for drone operations. RF emitters and radar reflectors enhance target threat replication and provide the required stimulus for anti-surface/radar weapons systems.

6C005 - The Fleet requires High Speed Maneuverable Seaborne Targets (HSMST) MK1.

6C006 - SDST (Ship Deployable Surface Target) will be used to support ship training and T&E exercises. This target will support training requirements of deploying ships, aircraft and surface gunnery requirements.

P-1 SHOPPING LIST

CLASSIFICATION:

DD Form 2454, JUN 86 ITEM NO. 114 PAGE NO. 1

# **UNCLASSIFIED**

	WEAPONS SYSTEM CO	OST AN	IALYSIS			Weapon Sy	/stem							DATE:	
ABBBOI	P-5					ID Code	D 4 ITEM N	OMENIOL ATLI	DE/OUBLIE A					Februar SUBHEAD	ry 2006
	PRIATION/BUDGET ACTIVITY rocurement, Navy					ID Code	P-IIIEWIN	OMENCLATUI	KE/SUBHEAL	J				SUBHEAD	
	DRDNANCE SUPPORT EQUIPMENT						ASW Rar	nge Suppor	t Equipme	nt BLI: 54	5500			846C	
			TOTAL COS	T IN THOUS	SANDS OF DO	DLLARS									
COST	ELEMENT OF COST	ID	Prior					FY 2005			FY 2006			FY 2007	
CODE		Code	Years Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
	(N43)														
	ASW RANGES (S06)														
6C001	Weapon System & Test Support Equip								1,734			1,755			1,702
6C002	Training/Test & Evaluation Equip.								2,287			2,251			2,263
6C830	Production Engineering								394			376			395
6C850	Production Improvement								326			327			349
	Sub-total								4,741			4,709			4,709
	SEABORNE TARGETS (SHIPS)														
6C001	QST 35 REPLACEMENT						1	736	736	2	748	1496	2	762	1524
6C003	TOWED TARGETS								261			308			350
6C004	INSTRUMENTAL								75			188			133
6C005	HSMST						6	160	960			0			(
6C006	SDST (Ship Deployable Surface Target)								0			100			120
6C830	PRODUCTION ENGINEERING								140			150			140
6C900	CONSULTING SERVICES								90			95			98
6C970	INTEGRATED LOGISTICS SUPPORT								123			90			114
	Sub-total						7		2,385	2		2,427	2		2,479
DD FORM	TOTAL 1 2446, JUN 86	P-1 SH	OPPING LIST			PAGE NO. 2	7		7,126	2		7,136	TION.		7,18

DD FORM 2446, JUN 86 ITEM NO. 114

### **UNCLASSIFIED** CLASSIFICATION:

BUDGET PROCURE	MENT HIST	ORY AND	PLANNING EXHIE	BIT (P-5A)		Weapon System		A. DATE	ebruary 20	06
B. APPROPRIATION/BUDG	ET ACTIVITY				C. P-1 ITEM NO				SUBHEAD	
Other Procurement	, Navy	BA-4 O	RDNANCE SPT I	EQUIPMENT	ASW RANG	SE SUPPORT EQUIP	MENT B	LI: 5455	; I	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FY05 QST 35 HSMST	1 6	736 160	NAVSEA NAVSEA	TBD TBD	GSA GSA	Silvership Silvership	Jun 05 Mar 05	Jun 06 Jul 05	YES YES	
FY06 QST 35	2	748	NAVSEA	TBD	GSA	TBD	TBD	TBD	YES	
FY07 QST 35	2	762	NAVSEA	TBD	GSA	TBD	TBD	TBD	YES	
D. REMARKS										

P-1 SHOPPING LIST Classification: ITEM NO. 114

PAGE NO. 4

# **UNCLASSIFIED**

		BUD	GET ITEM JUSTIFICA	TION SHEET	Γ			DATE:			
			P-40						Februa	ry 2006	
APPROPRIATION/BL	JDGET ACTIVIT	Υ				P-1 ITEM NOM	ENCLATURE			-	
OTHER PROCUR	EMENT, NA	/Y/BA-4				EXPI	LOSIVE ORD	NANCE DISE	POSAL EQUI	PMENT/BLI#	5509
Program Element for	Code B Items:					Other Related F	Program Elemer	its			
0603654N						0204424N					
	Prior	ID								То	
	Years	Code	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	Complete	Total
QUANTITY											
COST											
(In Millions)		Α	52.6	30.0	21.5	20.0	20.1	34.2	32.3	Cont.	Cont.
SPARES COST											
(In Millions)			6.4	6.4	6.7	7.8	7.3	7.5	7.8	Cont.	Cont.

The Navy is responsible for the management and execution of the Joint Service EOD unified procurement system as assigned by DOD Directive 5160.62. All procurement of EOD tools and equipment, both initial outfitting and replenishment, for all military services is made by the Navy. The Navy provides all procurement services. There is an annual average of 300 procurement actions for this material. Each military service funds its own hardware.

#### VN075-EOD EQUIPMENT/SYSTEM:

LARGE IMPROVISED EXPLOSIVE DEVICE (IED) ACCESS & DISRUPTION: Provides the EOD technicians an effective and reliable capability to neutralize large IEDs. An Abbreviated Acquisition Program (AAP) with no formal DT/OT required. System testing 12/00 to 2/05.

EOD MAN TRANSPORTABLE ROBOTIC SYSTEM (MTRS): A two man portable robotic system that provides the EOD Technician the capability to perform EOD tasks. An Abbreviated Acquisition Program (AAP) with no formal DT/OT required. System testing 10/02 to 12/04. Achieved Milestone C 5/05.

CLASSIFIED PROJECT II: Provides the EOD technician with the basic capability to block initiation signals to Improvised Explosive Devices (IEDs).

EOD DECISION SUPPORT SYSTEM (EOD DSS)/INITIAL CAPABILITY: Provides the EOD technician access to EOD information and maintains current capability to collect and analyze ordnance information, and to develop render safe procedures. DSS Initial Capability directly transitions technology and systems from the Knowledge Technology Operational Demonstration (KTOD) Advanced Concepts Technology Demonstration (ACTD).

CLASSIFIED PROJECT III (A & B): A system that provides the EOD technician protection from Improvised Explosive Devices (IEDs) and deliberate explosive devices by preventing their initiation, while working in close proximity to or on route to suspect devices. System testing 04/05 - 07/07.

JOINT SERVICE IMPROVISED EXPLOSIVE DEVICE COUNTERMEASURES (JS IED CM)/INITIAL CAPABILITY: Provides for the improved performance of existing IED CM systems. JS IED CM Initial Capability provides IED defeat for Force Protection assets.

P-1 SHOPPING LIST

CLASSIFICATION:

DD Form 2454, JUN 86 ITEM NO. 115 PAGE NO. 1

# BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATION APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA-4 DATE: February 2006 P-1 ITEM NOMENCLATURE EOD EQUIPMENT/BLI#5509

#### VN076- MARINE MAMMAL SYSTEMS/EQUIPMENT:

MMS VSW MCM: This funding supports initial outfitting of hardware and animal behaviors required for the subject systems to operate in a limited hostile environment and enhance system survivability.

VSW ACCESSORY SET: Procurement of enhanced hardware design which allows for the neutralization of mines in the VSW region which are subject to tidal surge and elevated currents.

MMS ALLOWANCE: Initial outfitting of tools/equipment including veterinary equipment for increased allowances of all Fleet MMS in accordance with CNO approved allowance list.

MMS MULTIPLE CAPABILITY: Procurement of enhanced equipment and animal behaviors which allow for multiple MMS capabilities within a single forward deployed MMS.

#### VN077-EOD OUTFITTING:

MATERIAL FOR NAVSCOLEOD: Provides for inert ordnance material to NAVSCOLEOD in support of Joint Service training.

INITIAL OUTFIT DET NAVAL RESERVE: EOD Naval Reserve Mobile Units/Detachments require initial outfitting of equipment on the Allowance List as approved by CNO.

EOD MOBILE UNIT ALLOWANCE: Initial outfitting of tools/equipment and personal issue items for increased allowances on the CNO approved Allowance List for both active Fleet and Naval Reserve EOD units.

EOD TACTICAL COMMS: Outfitting of tactical communications systems for EOD units/Dets for allowances on the CNO approved Allowance List.

VNCA1 - SELF CONTAINED BREATHING SYSTEM: Provides for the outfitting of a self contained breathing system used by EOD technicians. (FY05 & FY06 Congressional Add)

**VN830-PRODUCTION ENGINEERING**: Review all technical data packages prior to procurement and provide procurement instruction to the procuring activity in support of the EOD unified procurement system. Provides production engineering support for all EOD and MMS production contracts.

VN850-PRODUCT IMPROVEMENT: Engineering services to improve EOD/MMS Systems/Equipment in production to improve maintainability, utilize current technology and decrease cost.

VN860-ACCEPTANCE, TEST & EVALUATION: Test, inspect, accept first articles and, on a 100% basis, the production quantity of EOD tools and equipment being procured. These tools are man-rated, and proper functioning of each item must be verified.

VN870-IMPROVISED EXPLOSIVE DEVICE (IED): FY05 IED Defeat Supplemental for the Combined Explosive Exploitation Cell, Convoy Planning Tool, Active Jammers (ACORNs), BOMBOT, and Disposable Firing System.

VNTNG-INITIAL TRAINING: Provide training support packages which include curriculum material for Joint Service EOD and Marine Mammal systems equipment.

P-1 SHOPPING LIST

CLASSIFICATION:

DD Form 2454, JUN 86 ITEM NO. 115 PAGE NO. 2

# **UNCLASSIFIED**

BUDGET ITEM JUSTIFICATION SHEET		DATE:
P-40 CONTINUATION		February 2006
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	
OTHER PROCUREMENT, NAVY/BA-4	E	OD EQUIPMENT/BLI#5509
VN075 - EOD EQUIPMENT/SYSTEM: JOINT LASER ORDNANCE NEUTRALIZATION SYSTEM (JLONS): Provides the EOD technician the abi energy tool.	ility to remotely engage UXO ar	nd IEDs from a safe standoff distance with a tunable, directed
SEMI-AUTONOMOUS ORDNANCE NEUTRALIZATION SYSTEM (SAONS): The next generation of EOD EOD technician.	robot that incorporates semi-au	utonomous capabilities to improve efficiency and safety for the
VN076 - MARINE MAMMAL SYSTEMS/EQUIPMENT:  MEDICAL OUTFITTING: Provides for initial outfitting of additions to medical specific items to MMS allowan 3900.41D.	ce. This equipment enables flee	et MMS to meet care requirements articulated in SECNAVINST
MARINE MAMMAL SYSTEMS CONTINUOUS IMPROVEMENT PROGRAM (MMS CIP): Provides for education deployability, reduced footprint, and improved system effectiveness and suitability to meet EOD, AT/FP, and		outfitting of equipment to fleet MMS allowing for enhanced
P-1 SHOPPING LIST	CLASSIFICATI	ON:

PAGE NO. 3 DD Form 2454, JUN 86 ITEM NO. 115

# **UNCLASSIFIED**

	WEAPONS SYSTEM COST P-5	ANAL'	YSIS			Weapon Sy	rstem							DATE: Februa	ry 2006
	RIATION/BUDGET ACTIVITY					ID Code	P-1 ITEM N	OMENCLATU	RE/SUBHEAD	1			l .	Lonua	., 2000
Other Pro	ocurement, Navy/BA-4														
			1			Α		Explosive C	Ordnance Di	sposal Eq	uipment/74\	/N			
			TOTAL COS	r in thous	ANDS OF DO	LLARS									
COST	ELEMENT OF COST	ID	Prior					FY 2005			FY 2006			FY 2007	
CODE		Code	Years Total Cost	Quantity	Unit Cost	Total Cost	0	11-31-01	Total Cost	Quantity	Heit Occi	Total Cost	Quantity	L Unit Ocat	Total Cost
	SPONSOR N75		Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	I otal Cost	Quantity	Unit Cost	I otal Cost	Quantity	Unit Cost	Total Cost
	Explosive Ordnance Disposal Eq (N75)														
	,														
VN075	EOD EQUIPMENT/SYSTEMS								1,574			12,496			13,291
	LARGE IED ACCESS & DISRUPTION	Α					108	3	324						
	EOD MTRS	Α					10	125	1,250	40	125	5,246	17	125	2,31
	CLASSIFIED PROJECT II	Α							,	77	13				ĺ
	EOD DSS INITIAL CAPABILITY	Α								25	82			82	2,05
	CLASSIFIED PROJECT III	В										,	130		,
	JS IED CM INITIAL CAPABILITY	Α								16	260	4,200			
												,			-,-
VN076	MARINE MAMMAL SYSTEMS/EQUIP.								2,055			1,784			2,19
	MMS VSW MCM	Α							578						
	VSW ACCESSORY SET	Α					119	3	400	117	3	351	100	3	30
	MMS ALLOWANCE	Α							191			224			24
	MMS MULTIPLE CAPABILITY	Α							886			1,209			1,65
												1,=00			,,,,,
VN077	EOD OUTFITTING								19,269			11,715			3,96
	MATERIAL FOR NAVSCOLEOD	Α							150			200			20
	INITIAL OUTFIT DET NR	Α							350			320			30
	EODMU ALLOWANCE	Α							18,769			11,195			2,46
	EOD TACTICAL COMMS	Α							,			,			1,00
															,
VN830	PRODCUTION ENGINEERING	Α							724			670			70
VN850	PRODUCT IMPROVEMENT	Α							701			722			71
VN860	ACCEPTANCE, TEST & EVALUATION	Α							340			340			35
	INITIAL TRAINING	Α							200			300			27
VNCA1	SELF CONTAINED BREATHING SYSTEM	Α							3,300			2,000			
	IMPROVISED EXPLOSIVE DEVICE								24,419					1	
	COMBINED EXPLOITATION CELL								2,916					1	
	CONVOY PLANNING TOOL								1,750					1	
	ACORN								7,003					1	
	BOMBOT								6,500						
	DISPOSABLE FIRING SYSTEM								6,250					1	
l			0			0			52,582			30,027			21,49

DD FORM 2446, JUN 86

P-1 SHOPPING LIST

ITEM NO. 115

CLASSIFICATION:

# **UNCLASSIFIED**

CLASSIFICATION:

<b>BUDGET PROCUREM</b>	ENT HIST	ORY AND	PLANNING EXHIBI	Г (Р-5А)		Weapon System		A. DATE		
									February 20	06
B. APPROPRIATION/BUDGET Other Procurement, N BA 4: ORDNANCE SU	avy	QUIPMEN <sup>.</sup>	т		C. P-1 ITEM NOM	ENCLATURE MENT/BLI #5509			74	VN
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FISCAL YEAR (05) VN075										
MTRS	10	125	NSWCIHD, IH, MD		FFP	Foster Miller, Waltham, MA & iRobot, Burlington, MA	6/05	10/05	YES	
Large IED	108	3	NSWCIHD, IH, MD		FFP	TBD	9/05	4/06	YES	
VN076 VSW Accessory Set	119	3			wx	SSC, SAN DIEGO, CA	2/05	2/06	YES	
FISCAL YEAR (06) VN075										
EOD MTRS	40	125	NSWCIHD, IH, MD		FFP	Foster Miller, Waltham, MA & iRobot, Burlington, MA	1/06	10/06	NO	2/05
Classified Project II	77	13	NSWCIHD, IH, MD		FFP	CLASSIFIED	10/05	12/05	NO	6/05
EOD DSS Initial Capability	25	82	NSWCIHD, IH, MD		FFP	TBD	3/06	5/06	NO	5/06
JS IED CM Initial Capability VN076	16	260	TBD		TBD	TBD	1/06	6/06	NO	8/05
VSW Accessory Set	117	3			WX	SSC, SAN DIEGO, CA	2/06	2/07	YES	

D. REMARKS

P-1 SHOPPING LIST Classification: DD Form 2446-1, JUL 87

**UNCLASSIFIED** ITEM NO. 115 PAGE NO. 5

#### **UNCLASSIFIED** CLASSIFICATION:

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A) Weapon System A. DATE February 2006 C. P-1 ITEM NOMENCLATURE B. APPROPRIATION/BUDGET ACTIVITY **EOD EQUIPMENT/BLI #5509** Other Procurement, Navy **74VN BA 4: ORDNANCE SUPPORT EQUIPMENT** DATE OF SPECS DATE CONTRACT Cost Element/ QUANTITY UNIT LOCATION RFP ISSUE METHOD CONTRACTOR AWARD FIRST AVAILABLE **REVISIONS** FISCAL YEAR **DELIVERY** AVAILABLE COST OF PCO DATE & TYPE AND LOCATION DATE NOW (000)FISCAL YEAR (07) VN075 **EOD MTRS** 17 125 NSWCIHD, IH, MD FFP Foster Miller, Waltham, MA 1/07 10/07 YES & iRobot, Burlington, MA 82 **EOD DSS Initial Capability** NSWCIHD, IH, MD FFP TBD 3/07 5/07 NO 5/06 20 FFP NSWSIHD, IH, MD Classified Project III 130 CLASSIFIED 6/06 9/06 NO 5/06 260 TBD JS IED CM Initial 24 TBD NO TBD 1/07 7/07 8/05 Capability VN076 VSW Accessory Set 100 WX SSC, SAN DIEGO, CA 2/07 2/08 YES D. REMARKS

P-1 SHOPPING LIST

Classification: DD Form 2446-1, JUL 87 **UNCLASSIFIED** ITEM NO. 115 PAGE NO. 6

# **UNCLASSIFIED**

	F	SUDGET ITEM JUSTIFIC	ATION SHEE	Т			DATE:			
	_	P-40	ATION OTIEE	•			DATE.	Februa	ry 2006	
GET ACTIVIT	Υ				P-1 ITEM NOM	IENCLATURE				
MENT, NA\	/Y	<b>BA 4: ORDNANCE SI</b>	JPPORT EQU	IPMENT		ITEMS LESS	S THAN \$5M	BLI 554	300 / 554305	
de B Items:					Other Related I	Program Elemer	nts			
Prior	ID								То	
Years	Code	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	Complete	Total
		\$5.0	\$3.9	\$4.0	\$4.5	\$4.6	\$4.7	\$4.8		\$31.5
ľ	MENT, NAV	GET ACTIVITY MENT, NAVY de B Items:	P-40  GET ACTIVITY  MENT, NAVY  de B Items:  Prior ID	P-40  GET ACTIVITY  MENT, NAVY  de B Items:  Prior ID	MENT, NAVY  de B Items:  Prior ID Years Code FY 2005 FY 2006 FY 2007	P-40     P-1	P-40	P-40	P-40   P-1   ITEM NOMENCLATURE     P-1   ITEMS LESS THAN \$5M   BLI 554	P-40   P-1   ITEM NOMENCLATURE   P-1   ITEM SESS THAN \$5M   BLI 554300 / 554305

PROGRAM DESCRIPTION/JUSTIFICATION: Program Support Requirements for minor NAVSEA under \$5M is for Budget Activity 4 as follows:

#### RA001; MK92 ORDALT Procurement:

Provides hardware and related materials to modify Fire Control System MK92 Mod 2/6 installed onboard FFG 7 Class ships. Modifications correct safety, environmental, RM&A, cost of ownership and obsolescence deficiencies to maintain the readiness of the AAW/ASUW Weapons System mission for self and area defense against hostile air and surface threats, including anti-ship missile threats. Hardware is procured as Ordnance Alterations (ORDALTs). Installation of ORDALTs will be accomplished by either AIT (Alteration Installation Teams) or in conjunction with routine repair actions planned in the fiscal years following the procurement. \*\*MK13 Guided Missile Launching System support has been discontinued.

#### RA002: MK92 ORDALT Installation:

Provides funding to install procured MK92 ORDALTs into FFG 7 Class ships by AIT.

#### RA003; Industrial Facilities (Calibration Equipment):

Provides funding for capital type rehabilitation projects at three (3) government-owned, contractor- operated plants for weapon systems such as the MK 41 Vertical Launching System, MK 45 Gun Mounts, MK 13/26 Launching Systems, MK 13/26 Launching Systems, and PHALANX. Federal Acquisition Regulation Part 52.245-7 specifies facilities use contracts require government funding of capital type rehabilitation projects to support and maintain these facilities. These plants have an average age of 45 years and lack of proper maintenance will severely limit capabilities to maintain scheduled production rates and overall productivity. The following estimates support environmental, safety, energy conservation, and major repair at the GOCO facilities.

(Continued on next page)

P-1 SHOPPING LIST

ITEM NO. 116 PAGE NO. 1

CLASSIFICATION:

**UNCLASSIFIED** 

DD Form 2454. JUN 86

DD Form 2454, JUN 86

	BUDGET ITEM JUSTIFICATION SHEET		DATE:	
	P-40			February 2006
APPROPRIATION/BUDGET ACTIVITY		P-1 ITEM NOMENCLATURE		
OTHER PROCUREMENT, NAVY	BA 4: ORDNANCE SUPPORT EQUIPMENT	ITEMS LESS	S THAN \$5M	BLI 554300 / 554305
Program Element for Code B Items:		Other Related Program Elemen	nts	
reliable, and ready Navy and Marine Corps weapor the point where they become unsafe to store or worthis generic (non-weapons systems specific) test missiles, pyrotechnics, demolition systems/device: come from a need to replace or modernize obsole procured by these funds are generally "one of a ki Weapons systems specific equipment is procured feasible, to become more generic and support mo   RA005 Fleet Mine Support Equipment:  The Fleet Mine Support program provides for procured mine accordance with OPNAVNOTE C8550 Procurement of mine materials to replace expending and capabilities, such as upgraded processors for RA830; Fleet Mine Support Production Engine Funds will provide production engineering support	ipment in support of the NAVY weapons systems and ordnance Quality ons systems and ordnance items are provided to the Fleet. The results ould fail to function (unreliable) when needed and should be removed for equipment is needed to assess the effects of aging and exposure to elso, bombs, and torpedoes throughout the in-service portion of their life of the or economically non-repairable equipment or to acquire new or expand" and are used to support generic NAVY weapons systems and order/funded via the individual weapons system Program Management office re than one weapon system. This reduces the overall economic burder than one weapons and production support for readiness of all mines on the provide the following: (A) Procurement of mine materials led components used during the MET program for Mine Countermeast compatibility with current and projected technology. (D) Procurement	of the QE stock surveillance testing is rom service.  nvironmental conditions on NAVY weak excle and will be located at NAVSEA excleded generic test capabilities when not ance types.  es. After the weapon specific equipment to the NAVY.  in stockpile. This includes both the set to replace expended components use ures (MCM) proficiency. (C) Procurem of new MET shapes for MCM proficiency.	pons systems and or ngineering field activi- ew evaluation technic ent has entered the in- rvice mine program a d during the MET pro- lent of components to ncy.	data used to predict when items degrade to dnance such as mines, gun ammunition, ties. Requirements for the test equipment jues or process are needed. The equipments eventory, these funds adapt the capability, if and the Mine Exercise and Training (MET) or improve mine operational characteristics occumentation relating to mine material to be

P-1 SHOPPING LIST

CLASSIFICATION:

ITEM NO. 116 PAGE NO. 2

ITEM NO.

116 PAGE NO.

	WEAPONS SYSTEM COST ANA P-5	LYSIS		Weapon S	System										DATE: <b>Februa</b>	ry 2006
	PRIATION/BUDGET ACTIVITY Procurement, Navy			ID Code		ITEMS LE			BLI 55430	0 / 55430	5					
			TOTAL COS	ST IN THOUS	SANDS OF D	OLLARS										
COST	ELEMENT OF COST	ID Code							FY 2005			FY 2006			FY 2007	
			Total Cost		Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
RA001 RA002	FLT SUPPORT ORDALTS(MK92/MK13) FMP Installation	A						12	66	785 85	12	62	743 87	12	62	739 91
RA003	INDUST. FACILITIES (CALIB. EQUIP)									1,921			931			975
RA004	QUALITY EVAL TECH & EQUIPMENT									1,430			1,455			1,519
	FLEET MINE SUPPORT EQUIPMENT															
RA005	Mine System Support	Α								662			616			634
RA830	Production Engineering									120			95			83
			<del>                                     </del>	)	0		0			5,003			2 027			4,04
DD FOR	M 2446, JUN 86	P-1 SH	IOPPING LIS		v <sub> </sub>	1		'1	I	CLASSIFICA			3,927	TION:		4,04

# **UNCLASSIFIED**

BUDGET PROCUREME	ENT HISTORY	AND PLA	NNING EXHIBIT (P	-5A)		Weapon System		A. DATE	February 20	06
B. APPROPRIATION/BUDGET A Other Procurement, Na					C. P-1 ITEM NOM	ENCLATURE ITEMS LESS THAN \$	5M		SUBHEAD	RA
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FISCAL YEAR 2004										
RA005 - Flt Mine Spt Eq	VAR	VAR	VAR	VAR	VAR	VAR	VAR	VAR	YES	
RA001 - MK92 O/A	12	77.0	NSWC/PHD	12/3	CPFF	LOCKHEED/NJ	4/04	4/05	NO	
FISCAL YEAR 2005										
RA005 - Flt Mine Spt Eq	VAR	VAR	VAR	VAR	VAR	VAR	VAR	VAR	YES	
RA001 - MK92 O/A	12	66	NSWC/PHD	VAR	CPFF	LOCKHEED/NJ	4/05	4/06	NO	
FISCAL YEAR 2006										
RA005 - Flt Mine Spt Eq	VAR	VAR	VAR	VAR	VAR	VAR	VAR	VAR	YES	
RA001 - MK92 O/A	12	62.0	NSWC/PHD	VAR	CPFF	LOCKHEED/NJ	4/06	4/07	NO	
FISCAL YEAR 2007										
RA005 - Flt Mine Spt Eq	VAR	VAR	VAR	VAR	VAR	VAR	VAR	VAR	YES	
RA001 - MK92 O/A	12	62.0	NSWC/PHD	VAR	CPFF	LOCKHEED/NJ	4/07	4/08	NO	

D. REMARKS

P-1 SHOPPING LIST Classification: 116 ITEM NO. DD Form 2446-1, JUL 87 5

PAGE NO.

## **UNCLASSIFIED**

	BUDG	ET ITE	M JUSTIFICATION SHE P-40	ET					DATE: FEBRUAR	V 2006	
APPROPRIATION/BUDGET OTHER PROCUREMEN	-		1 -40			P-1 ITEM NOM	MENCLATURE		ILDIOAN	1 2000	
BA 4 - ORDNANCE SU	PPORT EQUIPM	/IENT				Α	NTI-SHIP MI	SSILE DEC	OY SYSTEM	IS BLI: 553	30
Program Element for Code	B Items:		0604757N, Project Number	er: U2190/K2	190/K2441	OTHER RELA	TED PROGRA	M ELEMENTS	1		
								N/A			
	FY 2004	ID								То	
	& Prior	Code	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	Complete	Total
QUANTITY	66		12	12	8	0	0	0	0	0	98
EQUIPMENT COST											
(In Millions)	233.4	Α	54.5	42.9	54.1	55.5	57.2	58.5	59.5	205.9	821.5
SPARES COST											
(In Millions)	1.2		0.1	0.2	0.2	0.1	0.0	0.0	0.0		1.8

#### PROGRAM DESCRIPTION/JUSTIFICATION:

The Anti-Ship Missile Decoy Program covers a family of decoys and the equipment to deploy them. It is an essential element of the Anti-Ship Missile Defense tactics to counter the threat of enemy homing missiles. Nulka is a joint program with Australia, and is currently in service with the Australian, Canadian, and United States Navies. Nulka underwent successful TECHEVAL and OPEVAL in July/August 1998 with a full rate production decision received in January 1999. This line contains various equipment and subsystems for a system which will provide the capability to defeat the effectiveness of hostile Anti-Ship cruise missiles. Currently Nulka is scheduled to be installed on the following ship classes: DDG 51, CG 47, FFG 7, LSD 41, LPD 17, LHA(R), DD(X) and the Coast Guard Deep Water Program. The installation will be performed during a limited availability by shipalt/Alteration Installation Team (AIT).

EQUIPMENT INSTALLATION: Funding is for the installation of equipment, including Fleet Modernization Program Installs, and installation of equipment at shore facilities

NOTE: No ERF. D funding

P-1 SHOPPING LIST PAGE NO. 1

CLASSIFICATION:

ITEM NO. 117

DD Form 2454, JUN 86

	WEAPONS SYSTEM P-5		IALYSIS			Weapon Sy	rstem						DATE: FEBRUA	ARY 2006	
	RIATION/BUDGET ACTIVITY					ID Code	P-1 ITEM N	OMENCLATUR	RE/SUBHEAD					SUBHEAD	
	rocurement, Navy PRDNANCE SUPPORT EQUIPMENT							ANTI-SHIP	MISSII F D	FCOY SY	STEMS B	I I: 5530			A4VV
DA 4. 0	MANUE GOI I GRI E GOII IMERI		TOTAL COST	Γ IN THOUS	ANDS OF DO	LLARS		AITH OIL	IIIIOOILL D	2001 01	OTEMO D	LI. 0000			7444
COST	ELEMENT OF COST	ID	FY04 &				1	FY 2005			FY 2006			FY 2007	
CODE	ELLIVEIVI OF GOOT	Code	Prior												
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
	EQUIPMENT														
	EQUI MENT														
VV001	NULKA SYSTEMS	А	23.8				12	281	3372	12	290	3480	8	390	3,120
VV002	NULKA DECOYS	А	129.9				86	402	34,572	55	421	23,155	79	420	33,180
VV003	Engineering Changes and Logistics Suppt		31.9						7,157			5,998			7,619
	EMC ORDALT Kits		4.0				72	48	(3,456)	41	55	(2,255)	78	48	(3,744)
	Engineering Changes		10.1						(1,188)			(1,049)			(1,313)
	Logistics Support		17.8						(2,513)			(2,694)			(2,562)
VV830	Production Engineering		11.0						1,500			1,523			1,546
VVINS	Installation Of Equipment (FMP)		34.1						7,875			8,745			8,666
	Decoy unit cost based on a combine	d United	ı States, Aus İ	stralia and	ı Canada bu <u>y</u> İ	і у. 									
									54,476			42,901			54,131

DD FORM 2446, JUN 86 P-1 SHOPPING LIST CLASSIFICATION: UNCLASSIFIED

BUDGET PROCUREMENT HISTO	ORY AN	ID PLAN	INING EXHIBIT (	P-5A)		Weapon System				
									FEBRUARY 200	6
B. APPROPRIATION/BUDGET	ACTIVIT	ГΥ			C. P-1 ITEM N	OMENCLATURE			SUBHEAD	
OTHER PROCUREMENT, NAVY					ANTI-SHIP MIS	SILE DECOY LAUNCHING SY	STEM		A4	VV
BA-4 - ORDNANCE SUPPORT E	QUIPM	ENT								
Cost Element/ FISCAL YEAR	QTY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	IF NO WHEN AVAILABLE
FISCAL YEAR 05										
VV001 (Systems)	12	281	NAVSEA		FP	Sechan Electronics Inc.	3/05	3/06	YES	
VV002 (Decoys)	86	402	DCMA Pacific		FP	BAeS, Australia	2/05	2/06	YES	
FISCAL YEAR 06 VV001 (Systems)	12	290	NAVSEA		FP	Sechan Electronics Inc.	3/06	3/07	YES	
VV002 (Decoys)	55	421	DCMA Pacific		FP	BAeS, Australia	2/06	2/07	YES	
FISCAL YEAR 07										
VV001 (Systems)	8	390	NAVSEA		FP	Sechan Electronics Inc.	3/07	3/08	YES	
VV002 (Decoys)	79	420	DCMA Pacific		FP	BAeS, Australia	2/07	2/08	YES	
D DEMARKS			1	1	1		1		1	

D. REMARKS

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST CLASSIFICATION:

ITEM NO. 117

PAGE NO. 3

CLASSIFICATION: UNCLASSIFIED FEBRUARY 2006

P3A		INDIVIDU	AL MODIFIC	ATION	ı																
MODELS OF SYSTEM AFFECTED:	None - O	riginal Insta	llations	TYPE	MODIFI	CATIC	ON:						MODIFI	CATIO	ON TITLE	E:				NULKA	
DESCRIPTION/JUSTIFICATION: Launching system modifications to support I	WIII KA Do	201/																			
Lauriching system modifications to support i	NOLKA De	coy.																			
DEVELOPMENT STATUS/MAJOR DEVELO			ES:																		
	FY 2004 and Price QTY			<u>F`</u> QTY	<u>Y 2005</u> \$	<u>FY</u> QTY	<u>/ 2006</u> \$	<u>FY</u> QTY	2007 \$	<u>FY</u> QTY	<u>2008</u> \$	<u>FY</u> QTY	2009 \$	<u>FY</u> QTY	2010 \$	<u>FY</u> QTY	<u>2011</u>	QTY	<u>TC</u> \$	<u>TC</u> QTY	OTAL \$
FINANCIAL PLAN (IN MILLIONS)																					
<u>RDT&amp;E</u>	3/58	147.0		0	3.8	0	3.0	0	1.0	0	1.0	0	1.0		1.0		1.1			3/58	158.9
<u>PROCUREMENT</u>																					
INSTALLATION KITS	65	23.8		12	3.4	12	3.5	8	3.1	0	0.0							0		97	33.8
INSTALLATION KITS NONRECURRING																					
SCN MK 53 DLS**	21	19.8		4	3.8	4	5.3	2	3.9	1		1		1		1					**
Coast Guard MK 53 DLS**				1	0.7	1	0.8	1	0.8	1	0.8	1	0.8	1	0.8	1	0.8				**
EQUIPMENT NONRECURRING		1.7																			1.7
ENGINEERING CHANGES		10.1			1.1		1.0		1.3		1.3		1.9		1.7		1.9		TBD		20.3
EMC ORDALT KITS	77	4.0		72	3.5	41	2.3	78	3.7	50	3.0									318	16.5
TRAINING EQUIPMENT*	1	0.97																		1	0.97
EXCHANGE RATE INCREASE (FY04)		4.4																			0.0
OTHER (DECOYS)	407	129.9		86	34.6	55	23.2	79	33.2	55	38.0	67	45.5	77	51.6	80	52.8	294	205.8	1200	614.6
LOGISTICS SUPPORT		17.8			2.5		2.7		2.6		2.7		2.6		2.7		3.0		TBD		36.6
PRODUCTION ENGINEERING		11.0			1.5		1.5		1.5		3.3		1.8		1.8		1.8		TBD		24.2
INTERIM CONTRACTOR SUPPORT																					
PROCUREMENT COST	551	199.3		98	46.6	67	34.2	87	45.4	55	48.3	67	51.8	77	57.8	80	59.5	294	205.8	1298	748.7
INSTALL COST	44	34.1		12	7.9	12	8.7	11	8.7	11	7.2	7	5.4		0.8		0.0			97	72.8
TOTAL PROGRAM		233.4			54.5		42.9		54.1		55.5		57.2		58.6	FIG	59.5		205.8		821.5

P-1 SHOPPING G LIST

CLASSIFICATION:

<sup>\*</sup> Qty (1) trainer procurement with install cost included.

CLASSIFICATION: U	JNCLASSIF	FIED																										FEBRUARY 200
P3A (Continued)								INDIVI	DUAL	MOI	DIFICATIO	N (Cor	ntinued)															
MODELS OF SYSTE	MS AFFEC	TED:	-	None. (	Origin	nal Inst	allatio	ns				MODI	IFICATIO	N TIT	LE:			NUL	(A									
INSTALLATION INFO				SHIPAL	T/AIT					-																		
ADMINISTRATIVE LE				6	Mon							UCTIO	ON LEAD			_			Months				_					
CONTRACT DATES: DELIVERY DATE:	:	FY 20		_		ch 2006 ch 2006		_			FY 2006: FY 2006:	_	March 2 March 2				FY 200 FY 200			arch 20 arch 20								
															(\$ in Mill	lions)												
Cost:			04 and Pr	ior				FY 2005			2006		FY 2007		Y 2008		F	Y 200				FY 2010		FY 2011		o Complete		otal
PRIOR YEARS		Qty	\$				Qty	\$	(	Qty	\$	Qty	\$		Qty	\$		Qty	\$		Qty	\$	Qty	\$	Qty	\$	Qty	\$
FY 2004 EQUIPMENT and Prior	NT	45	35.07																								45	35.07
FY 2005 EQUIPMEN	NT						12	7.8	В																		12	7.88
FY 2006 EQUIPMEN	NT									12	8.75																12	8.75
FY 2007 EQUIPMEN	NT											11		8.67													11	8.67
FY 2008 EQUIPMEN	NT														11		7.25										11	7.25
FY 2009 EQUIPMEN									+									7	5	.35							7	5.35
FY 2010 EQUIPMEN																					0	0.85						0.85
FY 2011 EQUIPMEN	NT																						0	0.00			98	0.00
TO COMPLETE **																												
INSTALLATION S	CHEDULE:	7	SHIP A	/AILABIL	ITIES	1						_												Ī				
	FY2004 AND PRIOR	1	<u>FY 2</u> 2	<u>0005</u> 3	4	1	<u>FY 2</u> 2	2 <u>006</u> 3 4	1	_	<u>Y 2007</u> 2 3	4	1	<u>FY 2</u> 2	008 3	4	1	<u>FY</u> 2	<u>2009</u> 3	4	1	FY 2010 2 3	4	<u>FY 20</u> 1 <u>2</u>	<u>3</u>	4 TC	TOTAL	
IN	45	3	4	2	2		3	3 4	0		5 5	1	1	4	1	5	2	3				0 0	0	0 0		0 0	98	
OUT	45	1	3	5	1	2	3	2 5	2		2 4	3	1	3	4	1	4	2	0	1	3	0 1	0	0 0	0	0 0	98	
* Includes one shore	site unit not	installe	ed on a sh	nip.																						CLA	ASSIFICATION	ON: UNCLASSIFIED

P-1 SHOPPING LIST ITEM NO. 117 PAGE NO 5

- 1

FY 2005/2006 BUDGET PRODU			HEDU	LE, P	-21													DA٦			EBRU								
APPROPRIATION/BUDGET AC OTHER PROCUREMENT, NAV			RDNAN	ICE S	UPPC	RT E	EQU	IPME	ENT			,	Wea	apon	Sys	tem		P-1	ITEM AN	_	MENC HIP MIS		_		SYSTI	EMS/	∕A4V\	/	
							Pro	duct	ion F	Rate					Proc	cure	men	t Le	adtime	es									
		Mar	nufactu	ırer's								AL	T Pr	rior	AL.	T Af	ter		nitial		Reord	der					Un	it of	
Item	1	Name	and L	ocatio	n	MS	SR	1-8	3-5	MA	λX	to	Oct	: 1	C	Oct 1		Mf	g PLT		Mfg P	LT		Tota	ı		Mea	asure	е
MK 53 DECOY LAUNCH SYSTEM	1		nan, P			9				18						6			14	-	14				-				_
MK 234 NULKA ELECTRONIC DECOY			S. Aus			66				19						6			12	_	12								_
WIN 234 NOLKA ELECTRONIC DECOT		DAGG	5, Aus	lialia		00	J			18	2					0			12		12								
																													_
		1	1	ı	1					FISC	AL YEA	AR 20	<b>04</b>								FIS	CALN	/EAR	2005					Т
ITEM / MANUFACTURER	F	s	Q	D	В		2003			00/		ENDA		ΔR 20	n4				2004	Т	1 10		ALEND		=ΔP ?	005			1
	Y	V	T	E	A	0		_	J	F				20	J-		_	0		,		N.	ALENL		-012 4			s	1,
		С	Υ	L	L	C	N O V	D E C	A N	E B	M A R	A P R	M A Y	N U	U	A U G	S E P	C T	N	. /	J F A E N B	A R	P R	A Y	N O	n n	A U G	E P	
SYSTEMS																				╅									t
MK 53 DECOY LAUNCH SYSTEMS	04		12	0	12				Α												2	1	2	1	2	1	2	1	
MK 53 DLS (SCN)	04		6	0	6				Α													L							(
MK 53 DLS (Coast Guard)	04		1	0	1				Α																				
MK 53 DECOY LAUNCH SYSTEMS	05		12	0	12																	Α							1
MK 53 DLS (SCN)	05		4	0	4																	Α							
MK 53 DLS (Coast Guard)	05		1	0	1																	Α							
DECOYS																													
MK 234 NULKA ELEC. DECOY (U.S.)	03		35	0	35					3	3	3	3	3	3	3	3	3	3 3	3 2									- (
MK 234 NULKA ELEC. DECOY (U.S.)	04		67	0	67					Α											6	5	6	6	5	6	5	6	2
MK 234 NULKA ELEC. DECOY (U.S.)	05		86	0	86																Α								8
										FISC	AL YEA	AR 20	06								FIS	CAL Y	/EAR	2007					
ITEM / MANUFACTURER	F	S	Q	D	В		2005			CALEN	IDAR '	YEAR	2006						2006			CA	LEND	AR YE	AR 2	2007			
	Υ	V	Т	E	Α	0	Ν	D	J	F	М	Α	М	J	J	Α	S	0	N E	) ,	J F	М	Α	М	٦	J	Α	S	
		С	Υ	L	L	С	0	Е	Α	Е	Α	Р	Α	U	U	U	Е	С	OE		A E	Α	Р	Α	U	U	U	Е	
						Т	V	С	Ν	В	R	R	Υ	N	L	G	Р	Т	V	1	N B	R	R	Υ	N	L	G	Р	
SYSTEMS																													Т
MK 53 DECOY LAUNCH SYSTEMS	04		12	12	0																								
MK 53 DLS (SCN)	04		6	0	6	2	1	2	1																				
MK 53 DLS (Coast Guard)	04		1	0	1					1																			1
MK 53 DECOY LAUNCH SYSTEMS	05		12	0	12						2	1	2	1	2	1	2	1		$\bot$			1						1
MK 53 DLS (SCN)	05		4	0	4														2 1			_							
MK 53 DLS (Coast Guard)	05		1	0	1															_	1	<b>-</b>	<b>L</b>			_	<b>.</b>		1
MK 53 DECOY LAUNCH SYSTEMS	06	<u> </u>	12	0	12						Α									$\perp$		2	1	2	1	2	1	2	-
MK 53 DLS (SCN)	06		4	0	4						Α									$\bot$		1	1					1	1
MK 53 DLS (Coast Guard)	06		1	0	1						Α									+		<b>.</b>	1						-
MK 53 DECOY LAUNCH SYSTEMS	07		8	0	8															-		Α	1	-					-
MK 53 DLS (SCN) MK 53 DLS (Coast Guard)	07 07	-	2	0	2										$\vdash$					+		A	1					1	
DECOYS	0/	1	1	U	1															+		А	1	-					$\blacksquare$
MK 234 NULKA ELEC. DECOY (U.S.)	04	1	67	45	22	6	5	6	5											+		-	1					1	╁
MK 234 NULKA ELEC. DECOY (U.S.)	05	1	86	0	86	U	Ü	υ	i)	7	7	7	8	7	7	7	7	7	8 7	٠ + ,	7	+	1					1	ł
MK 234 NULKA ELEC. DECOY (U.S.)	06	1	55	0	55					A	1		J	- 1	'	,	'	'	0 1	+	5	5	5	5	5	5	5	5	t
MK 234 NULKA ELEC. DECOY (U.S.)	07		79	0	79					_ ^										+	A	3	۲	3	5	J	3	- 3	t
	01		, ,				1			1								i 1	1	1		1	1	1			1	1	

**UNCLASSIFIED** 

	WEAPONS SYSTEM P-5		NALYSIS			Weapon Sy	rstem						FE	DATE: BRUARY 2	006
Other Pr	RIATION/BUDGET ACTIVITY OCUREMENT, NAVY RDNANCE SUPPORT EQUIPMENT					ID Code		OMENCLATU			ATION BLI:	566000 SB	HD:84TS		
			TOTAL COST	T IN THOUS	ANDS OF DO	LLARS									
COST	ELEMENT OF COST	ID Code	Prior Years					FY 2005			FY 2006			FY 2007	
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
	SURFACE MODS (N75/N76)														
TS004	SURFACE TRAINING DEVICE MODS														
	Surface Minor Mods (N75)		2,630						1,347			1,151			1,170
	Surface Minor Mods (N76)		33,231						3,722			6,539			7,249
	FFT/SLEP/Modular Trainer (N76)		1,375						922			922			922
TS007	MULTI-MISSION TEAM TRAINER (MMTT) (N76)		7,933						313	1	1,866	1,866	1	1,902	1,902
	SUBTOTAL (N75)		2,630			C			1,347			1,151			1,170
	SUBTOTAL (N76)		41,164			C			4,957			9,327			10,073
			43,794			0			6,304			10,478			11,243

118

ITEM NO.

PAGE NO.

2

# **UNCLASSIFIED**

			<b>BUDGET ITEM JU</b>	JSTIFIC/	ATION SHEE	Т			DATE:			
				P-	-40				FI	EBRUARY 20	006	
APPROPRIATION/BU	IDGET ACTIVIT	Υ					P-1 ITEM NOM	ENCLATURE				
OTHER PROCUR	EMENT, NA	VY	<b>BA-4 ORDNANC</b>	E SUPP	ORT EQUIPM	IENT	SURFACE	TRAINING D	<b>EVICE MODIF</b>	ICATIONS B	LI; 566000 SB	8HD; 84TS
Program Element for 0	Code B Items:						Other Related I	Program Eleme	nts			
	D.:-	l in	<del></del>		T	Ι		Γ	Γ	T	T =- T	
	Prior Years	ID Code	F	Y 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Complete	Total
QUANTITY												
COST (In Millions)	\$45.2			6.3	10.5	11.2	10.9	10.9	11.1	11.4		117.6
SPARES COST	7.0.2				. 3.0			1.51.5				
(In Millions)	0.1			0.1	0.1	0.1	0.1	0.1	0.1	0.1		0.8

This line provides funds to modify/upgrade training devices to maintain systems at Fleet configuration and to enhance training capability.

(TS004) SURFACE TRAINING DEVICE MODS Provides funding for surface warfare minor modifications. These modifications are improvements/upgrades to in-service surface training systems identified by the program offices and training activities, and are approved by the Resource Sponsor. Modifications are required to meet safety standards, keep training systems compatible with equivalent changes made to fleet operational equipment, and to enhance training capabilities. These modifications support the 300+ fielded Surface training systems and their concurrency with fleet operational configuration.

o Funding is provided annually for modifications to the Device S14A13 Tactical Advanced Simulated Warfare Integrated Trainer (TASWIT) - applicable to the Multi-Mission Team Trainer (MMTT). o Funds are provided for procurement and installation of one modular Firefighting Trainer (FFT) at PACNORWEST in FY04 and also funds the Service Life Extension (SLEP) of one FFT per year in FY05-11.

(TS007) MULTI-MISSION TEAM TRAINER (MMTT) Funding consolidates the software functionality of the Device S14A13 TASWIT and the Device 20F15 TACDEW Scenario Generation and Control (SG&C) subsystem. The TASWIT rehost is MMTT Phase 1 and is located at SWOS Newport, Fleet ASW Training Center, San Diego, and Fleet Training Center Norfolk. The TACDEW SG&C rehost is MMTT Phase 2 and is located at the Fleet Combat Training Centers (FCTCLANT and FCTCPAC).

PAGE NO. 1

P-1 SHOPPING LIST

ITEM NO. 118

CLASSIFICATION:

**UNCLASSIFIED** 

DD Form 2454. JUN 86

**UNCLASSIFIED** CLASSIFICATION:

MENT HISTO	DRY AND	PLANNING EXHIBIT	(P-5A)		Weapon System		a. date <b>FEE</b>	BRUARY 2	2006
RACTIVITY Navy	FOLUDM	ENT		SURFACE TRAI		IONS		SUBHEAD	·e
QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
Var	Var	NAWCTSD Orlando, FL	Various	Various	Various	Various	Various	Yes	N/A
	313	CDSA, Dam Neck	Various	Various	Various		03/05	YES	N/A
1	1,866 1,902	CDSA, Dam Neck	Various Various	Various Various	Various Various		03/06	YES	N/A N/A
	Var	Var Var  1 1,866	Var Var NAWCTSD Orlando, FL  313 CDSA, Dam Neck  1 1,866 CDSA, Dam Neck	SUPPORT EQUIPMENT  QUANTITY UNIT COST OF PCO REP ISSUE DATE  Var Var NAWCTSD Orlando, FL  313 CDSA, Dam Neck Various  1 1,866 CDSA, Dam Neck Various	TACTIVITY Navy SUPPORT EQUIPMENT  QUANTITY  UNIT COST (000)  Var  Var  Var  NAWCTSD Orlando, FL  Various  Various  1 1,866  CDSA, Dam Neck  Various  C. P-1 ITEM NOW SURFACE TRAI BLI: 566000  CONTRACT METHOD & TYPE  Various  Various  Various  Various  Various  Various  Various  Various	SUPPORT EQUIPMENT  QUANTITY  UNIT COST (000)  Var  Var  Var  Var  NAWCTSD Orlando, FL  Various  C. P-1 ITEM NOMENCLATURE SURFACE TRAINING DEVICE MODIFICAT BLI: 566000  CONTRACT METHOD & TYPE AND LOCATION  Various  Various  Various  Various  Various  Various  Various  Various  Various  Various  Various  Various  Various  Various  Various  Various	C. P-1 ITEM NOMENCLATURE SURFACE TRAINING DEVICE MODIFICATIONS BLI: 566000  QUANTITY UNIT COST (000)  Var Var NAWCTSD Orlando, FL  Var Var NAWCTSD Orlando, FL  Various Various Various Various Various Various Various  1 1,866 CDSA, Dam Neck Various Various Various Various Various Various Various	SUPPORT EQUIPMENT  QUANTITY UNIT COST OF PCO REPLIENCE DATE  Var Var NAWCTSD Orlando, FL  Various Various Various Various Various Various Various Various 03/05  1 1,866 CDSA, Dam Neck Various Various Various Various Various Various 03/06	ACTIVITY Navy SUPPORT EQUIPMENT  QUANTITY UNIT COST (000)  Var  Var  Var  Var  Var  Var  Var  Va

P-1 SHOPPING LIST

ITEM NO. PAGE NO.3 Classification: UNCLASSIFIED

## **UNCLASSIFIED**

		BU	IDGET ITEM JUSTIFICA	TION SHEE	T			DATE:			
			P-40						February 2	006	
APPROPRIATION/BUD	GET ACTIV	TY				P-1 ITEM NO	MENCLATURE				
OTHER PROCURE	MENT, NA	VY/BA-	4			SUBMAR	INE TRAINI	NG DEVICE	MODS/LI: 5	661/SBHD: 8	4TD/H4TD
Program Element for Co	de B Items:					OTHER RELA	TED PROGRA	M ELEMENTS	;		
	Prior	ID								То	
	Years	Code	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY2011	Complete	Total
QUANTITY											
EQUIPMENT COST											
(In Millions)			\$49.1	\$34.8	\$24.8	\$22.1	\$25.7	\$21.3	\$21.8		\$199.6
SPARES COST											
(In Millions)											

PROGRAM DESCRIPTION/JUSTIFICATION:

This line provides funds to modify/upgrade training devices to keep them compatible with equivalent changes made to Fleet operational equipment and to enhance trainer systems capabilities.

#### (TD002) SUBMARINE TRAINING DEVICE MODS

Provides funding for modifications which are upgrades to submarine training systems which are centrally managed systems. These improvements/upgrades are required to keep training systems compatible with equivalent changes made to fleet operational equipment and to change trainer capabilities to meet emergent training requirements.

#### (TD006) SUBMARINE COMMON OPERATIONAL ANALYSIS AND EMPLOYMENT TRAINER (COAET)

The COAET is an interactive, fundamental skills-level and employment skills trainer. It allows for introduction of new fleet requirements and upgrades. The purpose of these devices is to provide operator and introductory team training to submarine force personnel prior to entry into the full-up SMMTT3 team training. It also provides supplemental training to off-load the heavily utilized attack center trainers. COAET provides training utilizing partial tactical builds and emulations of the latest Sonar and Combat Control Systems. These devices provide an environment substantially equivalent to that found onboard ship, thus enabling students to develop and maintain the attack center expertise necessary to support Fleet operations.

FY05 procures 3 items: COAET kits at three training sites to support operational and employment skills training.

P-1 SHOPPING LIST

ITEM NO.119 PAGE NO. 1 CLASSIFICATION:

UNCLASSIFIED

DD Form 2454, JUN 86

BUDGET ITEM JUSTIFICATION SHEET	DATE:
P-40	February 2006
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE
OTHER PROCUREMENT, NAVY/BA-4	SUBMARINE TRAINING DEVICE MODS/LI: 5661/SBHD: 84TD/H4TD
Program Element for Code B Items:	OTHER RELATED PROGRAM ELEMENTS

#### (TD006) COMMON OPERATIONAL ANALYSIS AND EMPLOYMENT TRAINER (COAET) Continued

FY06 procures 4 items: Integration of AAT implementation of latest APB for towed array processing. Integration of latest STDA implementation. Modifications to sphere emulation and combat control emulation for training functionality required for BQQ-10 and BYG-1. Modifications to periscope simulation hardware and software. Update 4 Fleet sites

FY07 procures 4 items: Integration of AAT implementation of latest APB for towed array processing. Integration of latest STDA implementation. Modifications to sphere emulation and combat control emulation for training functionality required for BQQ-10 and BYG-1. Modifications to periscope simulation hardware and software. Update EPM and 3 Fleet sites

#### (TD009) Submarine Multi Mission Team Trainer (SMMTT) Phase 3

To achieve desired submarine force readiness levels, it is necessary to construct highly sophisticated shorebased Combat System Team Trainers capable of training personnel in all aspects of submarine approach, attack and surveillance operations in a controlled, simulated environment.

The Combat Control System (CCS) CCS MK 2 is installed on SSN and SSBN (TRIDENT) Class submarines, and there are currently plans to further upgrade these systems with the H/W and S/W revisions which provide enhanced warfighter capabilities. The Tactical Acoustic Rapid COTS (commercial-off-the-shelf) Insertion (ARCI) phased upgrades are being installed with the next revision which provides enhanced warfighter capabilities. These CCS and ARCI upgrades in the AN/BYG1 and BQQ-10 systems directly impact shore based Team Trainers. In addition, the Advanced Processing Builds (APB), and Technical Insertions (TIs) feed yearly and bi-yearly upgrades into the CCS/Acoustic deployment which also impact the trainers.

The Submarine Multi-Mission Team Trainer (SMMTT) supports operator, employment, strike, and Battle Group training for enlisted and officer pipelines for these sytems. The SMMTT provides individual operators and combat teams the opportunity to train ashore, prior to, and between deployments. The shore based training provides a means of maintaining team proficiency in stand alone or in combined team mode prior to ship deployment. SMMTT Phase 1 and Phase 2 were completed in prior years in this budget account to accomplish the trainer-unique software offload from legacy trainers and enable further enhancements.

P-1 SHOPPING LIST CLASSIFICATION:

ITEM NO. 119 PAGE NO. 2

**UNCLASSIFIED** 

DD Form 2454, JUN 86

DD Form 2454, JUN 86

## **UNCLASSIFIED**

BUDGET ITEM JUSTIFICATION SHEET	DATE:
P-40	February 2006
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE
OTHER PROCUREMENT, NAVY/BA-4	SUBMARINE TRAINING DEVICE MODS/LI: 5661/SBHD: 84TD/H4TD
Program Element for Code B Items:	OTHER RELATED PROGRAM ELEMENTS

#### (TD009) SMMTT Phase 3 Continued

SMMTT Phase 3 will replace all MIL Standard hardware in previous systems with commercial emulation hardware, enabling platform independence and wide area network capability. The use of open architecture trainer systems allows for the continuous growth of functional flexibility ultimately leading to employment training conducted for any submarine combat system. Plans are established to likewise upgrade submarine tactical systems to an open architecture, and the trainers will be compatible with the tactical interfaces. This program includes modifications to the functionality of the Periscope Simulator (PSIM) to provide common imaging training for CCS trainers.

FY05 procures 5 items: Four SMMTT 3 systems will be assembled and installed at Fleet training sites. Modifications will be made to the EPM to support integration and advancements in tactical software.

FY06 procures 5 items: Four SMMTT 3 systems will be assembled and installed at Fleet training sites. Modifications will be made to EPM to support integration and advancements in tactical hardware and software.

FY07 procures 7 items: Four SMMTT 3 systems upgraded to appropriate Advanced Processor Build and Technical Insertion. They will be assembled and installed at Fleet training sites. Modifications will be made to EPM to support integration and advancements in tactical hardware and software.

Legacy SMMTT SSBN procures Two items: kits containing TUE & TTE hardware and TUE software to stimulate the TI02 hardware, integrate and deliver into the SMMTT supporting APB02 at TRITRAFAC Bangor and Kings Bay.

P-1 SHOPPING LIST

CLASSIFICATION:

ITEM NO. 119 PAGE NO. 3

BUDGET ITEM JUSTIFICATION SHEET		DATE:
P-40		February 2006
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	
OTHER PROCUREMENT, NAVY/BA-4	SUBMARINE TRAINII	NG DEVICE MODS/LI: 5661/SBHD: 84TD/H4TD
Program Element for Code B Items:	OTHER RELATED PROGRAM	/ ELEMENTS

#### (TD015) SUBMARINE NON-TACTICAL APPLICATIONS DELIVERY INTERFACE SYSTEM (SNADIS) NETWORK

This system has been identified by the Submarine Type Commanders and approved by CNO to enable access to all data required to support Fleet Operational, Training, and Administrative requirements through a single, common, force-wide information delivery application interface. This program is for technical data, logistics, and training delivery management. The Program must operate within the IT21/NMCI network infrastructure; and should leverage both the VIRGINIA Class "paperless ship" initiatives and the Navy's non-tactical application development managed by SPAWAR, as well as recognize shipboard requirements for complete non-tactical applications integration. Additionally, broader digital data delivery mechanisms being evaluated by the Navy, such as Technical Data Knowledge Management - Integrated Data Environment (TDKM-IDE), are being employed to construct a comprehensive end-to-end program for identifying and sustaining Fleet information requirements. Fleet Application development needs and associated support are based on Commander, Naval Submarine Forces overarching requirements and priorities.

FY05, FY06, FY07 Procure software engineering and hardware for new applications, upgrades for delivered systems, and further Fleet installations of the SNADIS application suite. (FY05=24 ships; FY06=16 ships; FY07=16 ships)

#### TDCA1, TDCA2, TDCA3, TDCA4 Congressional Adds for use in Navy submarine Fleet systems.

TDCA1 Shipboard Non-tactical Application Delivery Interface System (SNADIS) Maintenance Support Service Module (MSSM) is a system upgrade that will be incorporated, integrated, and managed within the existing SNADIS program product line. These funds provide for procurement and support of the MSSM system. The MSSM is a software application environment that manages and documents the material history and readiness condition of various ship systems and components onboard submarines.

TDCA2 Performance Centric Mission Essential Content Delivery system supports shipboard mobile and detached network clients from the shore-based authoritative data sources. These funds procure, implement and support network client content and application synchronization service module of SNADIS.

TDCA3 Technical Data Knowledge Management (TDKM) procures and installs a full production TDKM capability for use in the Navy submarine Fleet and the Navy Schoolhouse infrastructure. The deployed production system manages, updates, and distributes training products and technical data from their origin at the technical data developer to their final destination at the warfighter's operational site.

TDCA4 (formerly TD016) Electronic Performance Support Systems (ePSS)

This project procures a series of innovative electronic Performance Support Systems (ePSS) tools for use in the Navy submarine Fleet that provide a means to facilitate On-the-Job Training without the need to temporarily remove the personnel from the ship for formal schoolhouse training. These systems are adapted and assembled from existing COTS software products and Navy authoritative technical content.

#### (TD6IN) INSTALLATION OF EQUIPMENT

Funding is for the installation of trainers, installation support for trainers, and installations in other shore facilities.

Estimates include competitive sourcing savings associated with consolidation of production support contracting efforts.

P-1 SHOPPING LIST CLASSIFICATION:

ITEM NO. 119 PAGE NO. 4

**UNCLASSIFIED** 

DD Form 2454, JUN 86

CLASSIFIC	WEAPONS SYSTEM CO		Weapon S	System							February 2006			
Other P	PRIATION/BUDGET ACTIVITY rocurement, Navy				ID Code		NOMENCLATU			DS/I I. 566	:1/CDUD.	0/TD/U/	•	2000
BA 4: U	RDNANCE SUPPORT EQUIPMENT	1	TOTAL CO	OST IN THOUSANDS OF	DOLLARS	SUBINA	RINE TRA	Повпи:	04 I D/П4	עווי				
COST	ELEMENT OF COST	ID	Prior	T			FY 2005			FY 2006			FY 2007	
CODE		Code Years Total Cost						Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
	SUBMARINE WARFARE (N77)													
TD002	SUBMARINE TRAINING DEVICE MODS							1,619			972			2,059
	Modifications							1,619			972			2,059
TD006	SUB COAET							2,252			2,004			2,039
	Modifications					3	621	1,863	4	469	1,876	4	466	1,864
	Tech Support							389			128			175
TD009	SMMTT Ph3							30,185			24,770			17,083
	Modifications					4	5,975	23,900	4	5,223	20,892	4	2,145	8,580
	EPM					1	3,465	3,465	1	1,391	1,391	1	2,145	2,145
	Modifications							0			0	2	1,750	3,500
	Tech Support							2,820			2,487			2,858
TD015	SNADIS  Modifications							<b>4,397</b> 4,397			<b>2,965</b> 2,965			<b>2,932</b> 2,932
	Congressional Adds							10,000			3,400			0
TDCA1	SNADIS MSSM	1						3,500			0			0
TDCA2	Performance Centric	1						1,000			1,400			0
TDCA3	TDKM							2,500			0			0
TDCA4	ePSS							3,000			2,000			0
	TOTAL BLI 566100							48,453			34,111			24,113
TD6IN	INSTALLATION (Non-FMP)							615			630			663
	TOTAL BLI 566106	1						615			630			663
								49,068			34,741			24,776

DD FORM 2446, JUN 86 P-1 SHOPPING LIST CLASSIFICATION:

ITEM NO. 119 PAGE NO. 5 UNCLASSIFIED

<b>BUDGET PROCURE</b>	MENT HIST	ORY AND	PLANNING EXHI		Weapon System		A. DATE				
									Februar	y 2006	
B. APPROPRIATION/BUDGE	T ACTIVITY				C. P-1 ITEM NON	IENCLATURE			SUBHEAD		
Other Procurement, BA 4: ORDNANCE S		OLUDMEN	. <del>.</del>		CUDMADING		MODIFICA	TIONS		0.4TD	
BA 4: UNDINANCE S	DOPPORTE	QUIPMEN	<b> </b> 	T		TRAINING DEVICE I	VIODIFICA			84TD	
					CONTRACT			DATE OF	SPECS	DATE	
Cost Element/	QUANTITY	UNIT	LOCATION	RFP ISSUE	METHOD	CONTRACTOR	AWARD	FIRST	AVAILABLE	REVISIONS	
FISCAL YEAR		COST	OF PCO	DATE	& TYPE	AND LOCATION	DATE	DELIVERY	NOW	AVAILABLE	
		(000)									
FISCAL YEAR (05) TD006 COAET COAET Kits	3	621	NAVSEA	N/A	wx	NSWC/CD	Nov-04	Sep-05	YES		
TD009 SMMTT Ph 3											
SMMTT Kits	4	5,975	NAVSEA	N/A	WX	NSWC/CD	Nov-04	Feb-05	YES		
SMMTT EPM	1	3,465	NAVSEA	N/A	WX	NSWC/CD	Oct-04	Feb-05	YES		
D. REMARKS											

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST Classification:

ITEM NO. 119 PAGE NO. 6 UNCLASSIFIED

BUDGET PROCURE	MENT HIST	ORY AND	PLANNING EXHIE	BIT (P-5A)		Weapon System		A. DATE						
					1				Februar	y 2006				
B. APPROPRIATION/BUDGE					C. P-1 ITEM NON	IENCLATURE			SUBHEAD					
Other Procurement,	-	OLUDMEN	-		CUDMA DINE	TRAINING DEVICE M	ODIFICA	TIONS		LLATO				
BA 4: ORDNANCE S	UPPORT E	QUIPMEN	1	Ī		ETRAINING DEVICE M	ODIFICA	I		H4TD				
					CONTRACT			DATE OF	SPECS	DATE				
Cost Element/	QUANTITY	UNIT	LOCATION	RFP ISSUE	METHOD	CONTRACTOR	AWARD	FIRST	AVAILABLE	REVISIONS				
FISCAL YEAR		COST	OF PCO	DATE	& TYPE	AND LOCATION	DATE	DELIVERY	NOW	AVAILABLE				
		(000)												
FISCAL YEAR (06) TD006 COAET														
COAET Kits	4	469	NAVSEA	N/A	WX	NSWC/CD	Nov-05	Feb-06	YES					
TD009 SMMTT Ph 3 SMMTT Kits	4	5,223	NAVSEA	N/A	WX	NSWC/CD	Nov-05	Aug-06	YES					
SMMTT EPM	1	1,391	NAVSEA	N/A	WX	NSWC/CD	Nov-05	Dec-06	YES					
FISCAL YEAR (07) TD006 COAET COAET Kits COAET EPM	3 1	466 466	NAVSEA NAVSEA	N/A N/A	wx wx	NSWC/CD NSWC/CD	Nov-06 Nov-06	Apr-07 Feb-07	YES YES					
TD009 SMMTT Ph 3 SMMTT Kits SMMTT EPM SMMTT SSBN	4 1 2	2,145 2,145 1,750	NAVSEA NAVSEA NAVSEA	N/A N/A N/A	WX WX WX	NSWC/CD NSWC/CD NSWC/CD	Nov-06 Nov-06 Nov-06	May-07 Mar-07 Aug-07	YES YES YES					
D. REMARKS														

DD Form 2446-1, JUL 87 P-1 SHOPPING LIST Classification:

ITEM NO. 119 PAGE NO. 7 UNCLASSIFIED

CLASSIFICATION: LINCLASSIFIED Februarner 2005

P3A		INDIVID	UAL M	ODIFICAT	ΓΙΟΝ																1 Obi dai	Jei 2003
MODELS OF SYSTEM AFFECTED: Subma	arine Multi	Mission			TY	PE MOI	DIFIC	ATION:	Initial	and Upo	arades	5			MOI	DIFICAT	ION T	ITLE:	TD00	9 SMMTT		
Team 1	rainers (S				_ ``						<b>J</b>	=										
DESCRIPTION/JUSTIFICATION:	<del>-</del> ·																					
TD009 Combat Control/Acoustic Tean	i irainers	s support	Subtea	am training	jas w	en as run	COM	oai sysie	em tea	m trainin	ıg.											
DEVELOPMENT STATUS/MAJOR DE	/ELOPM	ENT MIL	ESTO	NES:																		
	FY 200	04 & Prio	r	<u>FY</u>	F۱	/ 2005	F۱	<b>/</b> 2006	FY	2007	FΥ	/ 2008	F۱	/ 2009	F۱	/ 2010	FΥ	2011		<u>TC</u>	TO	TAL
	QTY	\$	QTY		QTY		QTY		QTY		QTY		QTY					\$	QTY	\$	QTY	\$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																					0	0.0
<u>PROCUREMENT</u>																						
INSTALLATION KITS																					0	0.0
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRI	NG																				0	0.0
EQUIPMENT																					0	0.0
EQUIPMENT NONRECURRING																					0	0.0
ENGINEERING CHANGE ORDERS																					0	0.0
DATA																					0	0.0
TRAINING EQUIPMENT	1	9.9			5	30.2	5	24.8	7	17.1	8	14.3	6	17.7	5	13.1	5	13.5			42	140.6
SUPPORT EQUIPMENT (CCM & SS)																					0	0.0
OTHER LBU/GFE)																					0	0.0
OTHER																					0	0.0
OTHER																					0	0.0
INTERIM CONTRACTOR SUPPORT																					0	0.0
INSTALL COST (FMP ORDALT)		0.6				0.6		0.6		0.7		0.7		0.7		0.7		0.8				5.4
TOTAL PROCUREMENT	1	10.5	0	0.0	5	30.8	5	25.4 ITEM	7	17.8	8 AGE	15.0 8	6	18.4	5	13.8	5	14.3	01.4	0.0 SSIFICATION	42	146.0

CLASSIFICATION: U	NCLASSIFI	IED																								Febru:	ary 2006
P3A (Continued)				INDIVI	DUAL	MODIFICA	TION	(Continue	d)																		•
MODELS OF SYSTEM	MS AFFECT	ED: SMN	ИТТ			_ MOI	DIFICA	ATION TITL	E:		TD009 SM	MTT										_					
INSTALLATION INFO METHOD OF IMPLEM ADMINISTRATIVE LE	MENTATION	I: Navy Fig 6 Month		ties and	<u>I</u> Prim			LEADTIME	i:			12 N	1onths														
CONTRACT DATES: DELIVERY DATE:			Nov-03 Dec-04			FY 2005: FY 2005:		Nov-04 Feb-05		-				FY 20 FY 20			Nov-05 Aug-06					2007: 2007:			lov-06 Mar-07		
Cost:		ΡΥ	F	,		Y 2005		FY 2006			(\$ in I Y 2007		s) Y 2008			FY 200	10		Y 2010	1 -	Y 2011	IT <sub>2</sub> C	'amanlata			Total	
Cost:	Qty	\$   \$	Qty	\$	Qty	\$	Qty	\$		Qty	\$	Qty	\$		Qty	FY 200		Qty	\$ 2010	Qty	\$ 2011	Qty	omplete \$		Qty	Total	\$
PRIOR YEARS	5	5 0.6			1	0.0					·	,	•			•			Ť						6		0.6
	-																								0		0.0
FY 2005 EQUIPMEN	IT				2	0.6	3		0.5																5		1.1
FY 2006 EQUIPMEN	IT						1		0.1	4	0.4														5		0.5
FY 2007 EQUIPMEN	IT									7	0.3														7	1	0.3
FY 2008 EQUIPMEN	IT											7		0.7	1		0.1								8		0.8
FY 2009 EQUIPMEN	ΙΤ														6		0.6								6		0.6
FY 2010 EQUIPMEN	ΙΤ																	5	0.7	,					5		0.7
FY 2011 EQUIPMEN	IT																			5	0.8	3			5	<u> </u>	0.8
TO COMPLETE																											
INSTALLATION SC	CHEDULE:																										
FY 2004		FY			FY	200 <u>5</u>		FY 200	) <u>6</u>		FY	2007			FY	2008			FY 2009			FY 20	<u>10</u>		FY 2011	TC	
& Prior	1	2 3	4	1	2	3 4	1	2	3	4	1 2	3	4	1	2	3	4	1	2 3	4	1 2	3	4	1	2 3	4	TOTAL
In 5				0	3	0 0	2	1	1		2 1	6	2	0	1	4	2	1	1 4	1	0 1	4	0	0		0	47
Out 5				0	3	0 0	2	11	1	0	2 1	6	2	0	1	4	2	1	1 4	1	0 1	4	0	0	1 4	0	47
																					P-3	٨					
						ľ	TEM	119	P	age	9								CLA	SSIFI			ASSIFIED	<del></del>			

February 2006 CLASSIFICATION: UNCLASSIFIED

РЗА	INDIVIDUAL MODIFICATION  Interpretational Analysis TYPE MODIFICATION: Initial and Upgrades MODIFICATION TITLE: TD006 COAET																					
MODELS OF SYSTEM AFFECTED: Commo					_ TY	PE MO	DIFIC	ATION:	Initial	and Upg	grades	3			MOE	DIFICAT	ION T	TTLE:	TD00	6 COAET		
and Em DESCRIPTION/JUSTIFICATION:	ploymen	t Trainer (0	COAET	)	_																	
TD006 COAET provides pipeline training	ng to sub	omarine fo	orce pe	ersonnel w	ho rec	quire bas	sic and	d advanc	ced ope	eratior tr	aining	g. This tr	aining	j is cond	ucted	at shor	e trair	ning fac	ilities.			
DEVELOPMENT STATUS/MAJOR DEV	ELOPM	ENT MILI	ESTON	NES:																		
	FY 200	04 & Prior		<u>FY</u>	F۱	/ 2005	F١	2006	FY	2007	FY	′ 2008	F١	<u>/ 2009</u>	FΥ	<u>′ 2010</u>	FY	2011		<u>TC</u>	то	TAL
	QTY	\$	QTY		QTY	\$	QTY		QTY	\$	QTY		QTY		QTY		QTY	\$	QTY	\$	QTY	\$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																					0	0.0
<u>PROCUREMENT</u>																						
INSTALLATION KITS																					0	0.0
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRIN	G																				0	0.0
EQUIPMENT																					0	0.0
EQUIPMENT NONRECURRING																					0	0.0
ENGINEERING CHANGE ORDERS																					0	0.0
DATA																					0	0.0
TRAINING EQUIPMENT	1	2.0			3	2.3	4	2.0	4	2.0	4	2.1	4	2.1	4	2.2	4	2.2			28	16.9
SUPPORT EQUIPMENT (CCM & SS)																					0	0.0
OTHER LBU/GFE)																					0	0.0
OTHER																					0	0.0
OTHER																					0	0.0
INTERIM CONTRACTOR SUPPORT																					0	0.0
INSTALL COST (FMP ORDALT)	0	0.0			3	0.0	4	0.0	4	0.0	4	0.0	4	0.0	4	0.0	4	0.0				0.0
TOTAL PROCUREMENT	1	2.0	0	0.0	3	2.3	4	2.0	4	2.0	4	2.1	4	2.1	4	2.2	4	2.2		0.0	28	16.9
								ITEM	119	P.	AGE	10	)						CLAS	SSIFICATION	ON: UNCL	ASSIFIED

CLASSIFICATION: U	NCLASSIFI	IED																						F	ebrua	ary 2006
P3A (Continued)				INDIVI	DUAL	MODIFICA	TION	(Continued)																		-
MODELS OF SYSTEM	MS AFFECT	ED: COA	ET			_ MOI	DIFICA	ATION TITLE:		TD006 C0	DAET										_					
INSTALLATION INFO METHOD OF IMPLEN ADMINISTRATIVE LE CONTRACT DATES:	MENTATION ADTIME: FY 2004	6 Month	Nov-03		-	FY 2005:	TION	LEADTIME: Nov-04			12 N	/lonths	FY 2			Nov-05					2007:			ov-06		
DELIVERY DATE:	FY 2004	:	Dec-04	-		FY 2005:		Sep-05		(\$ in	Million	e)	FY 2	(006:	<u> </u>	eb-06	_			FY	2007:		F	eb-07		
Cost:	T F	γ	FY	,	F	Y 2005		FY 2006	F	Y 2007		Y 200	8		FY 200	9	F	Y 2010	F	Y 2011	To C	omplete			Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	6	Qty	\$	3	Qty	\$	Qty	\$	Qty	\$		Qty		\$
PRIOR YEARS	(	0.0	)		1	0.0																		1		0.0
																								0		0.0
FY 2005 EQUIPMEN	IT				1	0.0	2	0.0	)															3		0.0
FY 2006 EQUIPMEN	IT						4	0.0	)															4		0.0
FY 2007 EQUIPMEN	IT								4	0.0	)													4		0.0
FY 2008 EQUIPMEN	IT										4		0.0											4		0.0
FY 2009 EQUIPMEN	IT													4		0.0								4		0.0
FY 2010 EQUIPMEN	IT																4	0.0						4		0.0
FY 2011 EQUIPMEN	IT																		4	0.0	)			4		0.0
TO COMPLETE																										
INSTALLATION SC	HEDULE:																									
FY 2004		<u>FY</u>			FY	2005		FY 2006		<u>FY</u>	2007			<u>FY</u>	2008			FY 2009		<u> </u>	Y 201	<u>10</u>	1	Y 2011	TC	
& Prior	1	2 3	4	_ 1	2	3 4	1	2 3	4	1 2	3	4	1	2	3	4	1	2 3	4	1 2	3	4			4	TOTAL
In 0				1	0	0 1	2 2	1 0	3	0 1	3	0	0	4	0	0	0	1 3 1 3	0	0 4 0 4		0	0		0	28 28
Out 0					0	0 1	J [	-	3	0 1	3	0	0	4	0	0	<u> </u>	-	0	P-3		0	0	1 3	υl	26
						ľ	TEM	119	Page	e 11								CLA	SSIFI	CATION:	UNCL	ASSIFIED	)			